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cettectget gggeegette etgeatatgt ttgtcaagge tetgagggtg cacetegget
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                                                                      360
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PCT/US01/02687 WO 01/54477

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cgaaactggt gctcccgacc cctggcaagc ccatcctccc cgtgcagaca ggggagcagg
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cccagcaaga ggagcagtcc agcggcatga ccattttctt cagcctcctt gtcctagcta
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                                                                      360
```

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cgtggggatg agtgacggaa acccagaget cetgteaace agccagacet acaacggeca
                                                                      180
gagegagaac aacgaagact atgagateee eeegataaca eeteecaace teeeggagee
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atecetectg cacetggggg accaegaage cagetaceae tegetgtgee aeggeeteae
                                                                      300
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                                                                      120
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ggagetetee gatgtagggg cageaggtgt agageagetg etggteeace acaggegeat
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ccagaaagaa caagteetea gggactgtgg gaatetggaa aagecagtee agggeageaa
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cgacctcacc gagcaggaga tacggaccct ggagcattgt cccaattcct tcttctaatg
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cttgggtggt tcgtgttcag gcagcaaaac tgttgggctc tatggagcaa gtcagttctc
                                                                      300
                                                                      360
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                                                                      439
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		agggctcgtt				300
		ccctggacta				360
		ggggcgagaa				420
		tggcagggac				480
		tggtgacgcg				540
		ttaaggggga				600
		gaacggtggt				660
		gctgaattga				720
		ccccccccg				780
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		actaccctca				420
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accggctaac	cctggaagac	atcttccatg	acctgttcta	ccacttagag	ctccaggtca	540
accgcaccta	ccaaatggtg	agtgtatgtt	gcaccctggt	ctttctctgc	ctaggaagcc	600
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                                                                      300
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gagagagagc agagcctgtg cccccgggga gcgccccaac ttcctgggta tcagggaaca
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gatececece cacaacetta tttettagee eecteetgag ggtagagteg egtggageta
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aatgtgttgt ctgttgctag gagacagtct gtaatttacc aaatgtgccg gtccttggcc
                                                                      360
                                                                      420
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ctccttgctg accettcccc tctggaagtg gcagccaatc tggggcccag gaatgttgtt
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                                                                      673
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     <213> Homo sapiens
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     <221> misc_feature
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tcatgcgtgc gctgtgtgtt gtgtgtgtat atctgcggag acgcataaag tatgagcgct
                                                                      120
ttttaggatg ggaattgaga tgtaagattt gggggtgagg gccnccctga cccataggcc
                                                                      180
tgacateete ateetatgga eeetagagte tggecaetee aggaacetga eetgetetgt
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300

geocegece tgtaageata gaacacece catgatetee tggagtgggg cetecgagae

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<210> 866

<211> 505

<212> DNA

<213> Homo sapiens

<220>

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catgtacatt gcagtcatac tggagaattt tagtgttqcc actgaaqaaa qtactqaacc
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tctgagtgag gatgactttg agatgttcta tgaggtttgg gagaagtttg atcccgatgc
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gacccagttt atagagttct ctaaactctc tgattttgca gctgccctgg atcctcctct
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totcatagca aaacccaaca aagtccagct cattgccatg gatctgccca tggttagtgg
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tgaccggatc cattgtcttg acatcttatt tgcttttaca aagcgtgttt tgggtgagag
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caaagtgtcc tatgaaccca tcaca
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atttgtactt ggcaaagacg acttaatttc tcatttgtta tgtcatttaa acctctcttt
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agageetete eteaetetta eetgttaata ateggaagte agetacatga aaegtteaat
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ttgggttcca tctcctctga agaaaaatgc agttaaaaaa aaaataagag gtttggccag
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ccgcagtggc tcacacctgt aatcccagca ttttgggagg ccgaggcagt cagatcacct
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acaatata
                                                                     608
     <210> 868
     <211> 772
     <212> DNA
     <213> Homo sapiens
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     <221> misc feature
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aagagagaa agaggggccc tctgtggagg cactggcggc gggaaaccta cccatactat
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gctgtgaaga acgtcctgga gctcaccctc tatgacaagg acatcctggg cagcgaccag
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atgaagggta tgattttggg agaggggaga gccccacggc aacagcacgg ccaatcttgg
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gaggggggg tgggaccete ecceetetee cenngnanaa acaceggagg gaagatagtt
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gggttttggg aagaaatggc gaatgggacc ggcgccccac cccgcccccc ct
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     <211> 704
     <212> DNA
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                                                                      420
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accagegaga ggaggaaccc accagaagga ggaaaacgcg gaacacatet gaatatcaga
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     <212> DNA
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    <220>
    <221> misc feature
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cegggagege geggatgteg gtgtteetgg ggecagggat gecetetgea tetttattag
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aaaggatagg agagccagca aatgttactg caattgtatc gctgtatgga gaggacgctg
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420
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taacattaca gaaaccttca gcaaatgtga agcttggatg gccaaggact gttactgtga
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caatattatc aaatggacaa atggcatttt gggaatttat tttcatttta aatattggcc
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                                                                   120
agatgtactt gtgcttcctg ctggccgtgc tgctgcagct ctacgtggcc acggaggcca
                                                                   180
                                                                   240
tecteattge actggttggg gecacgecat cetaceactg ggacetggea gageteetge
caaatcagag ccacggtaac cagtcagctg gtgaagacca ggcctttggg gactggctcc
                                                                   300
                                                                   360
tgacagccaa cggcagtgag atccataagc acgtgcattt cagcagcagc ttcacctcta
tegeetegga gtggttttta attgeeaaca gateetacaa agteagtgea geaagetett
                                                                   420
ttttcttcag tggtgtattt gttggagtta tctcttttgg tcagctttca gatcgcttcg
                                                                   480
                                                                   498
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     <211> 404
     <212> DNA
     <213> Homo sapiens
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etgeegeege tegeetggga ttacgtgetg egtettgetg etactcaatt getegggggt
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ccccatgtct ctggcttcct ccttcttgac aggttctgtt gcaaaatgtg aaaatgaagg
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tgaagtcctc cagattccat ttatcacaga caacccttgc ataatgtgtg tctgcttgaa

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300

360

404

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                                                                      180
tacttggttt ccgtctgcct gtgtgttgcc gttattgtcg ccttccagtt aacagctttt
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actiticegea agaactigge agecaeggee etectgetgt cactititegg atatgeaact
                                                                      300
cttccatgga tgtacctgat gtccagaatc ttttccagtt cggacgtggc tttcatttcc
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cecteaactt cteetteage cataaateag acatetggte cetgggetge atcattetgg
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acatgaccag ctgctccttc atggatggca cagaagccat gcatctgcgg aagtccctcc
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gccagagccc aggcagcctg aaggccgtcc tgaagacaat ggaggagaag cagatcccgg
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atgtggaaac cttcaggaat cttctgccct tgatgctcca gatcgacccc tcggatcgaa
                                                                      360
taacgataaa gtgagctcag ggtcggggtt tattttaacc tgtggattta tctttcaaca
                                                                      420
tetetecace etaatacaag cacagetagt tggetttgta aegeeteaaa gaactecate
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acagatgece tgattatece tgeacagetg ggetttgece agttetgget eteccaaace
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gtgctgcggc gagtaatccc gaatgtacgg tggagtgagc agactgaccc ccaggaggca
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caggaggcgt agcccccagg acccacgaca cttttagggt tccagaaaaa agttttcatt
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caacataaaa aaaaaaaaat teetaaagae aaaaaaaaaa aaa
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     <212> DNA
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gctggctgct ggcactgtgc ctggcctggc tgtggaccca cctgaccttg gctgccctgc
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agecteceae tgccacagtg cttgtgcage agggcacetg cgaggtgatt geggeteaee
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getgetgeaa eeggaacege ategaggage geteecagae ggtgaaatge teetgttttt
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ctggccaggt ggccggcacc acgcgggcaa agccctcctg cgtggacgac ctgctcttgg
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catcgtcct
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429

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<210> 879

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aatatttgcc cacggcctcc caggcccagg cccatgccac ctgggccccg gcatctgttt
                                                                      180
gaggatetge caatgtgete ttaactgagg acgaaggaag aacacettte tatgagtett
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gcaaagatta cctccttcag gccacaaata tttgagtgca cactacgtgc caggcactgt
                                                                      300
geagggetge aggeatagag acagaatgta atetatetgg geettggace ceatagggag
                                                                      360
aggggaccac tcaggtccat acttcctttg gacttggggc tttggccttg ggagggggg
                                                                      420
aggtggcgtg gcaagatgaa aaagacatcc tgcccccatc cacttgggca gagcttct
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     <213> Homo sapiens
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gcctggttcc tggagaacat ggctgtgttg accataagca gtgctactct ggccatcgtt
                                                                      240
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gattttggga tgtcagtcgt catgctgagc tacctcttga gtgcattttt cagccaagct
                                                                      360
aatacagegg ceetttgtac cageetggtg tacatgatea getttetgee etacatagtt
                                                                      420
ctattggttc tacataacca attaagtttt gttaatcaga catttctgtg ccttctttcg
                                                                      480
acaaccgcct ttggacaagg ggtatttttt attacattcc tggaaggaca agagacaggg
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                                                                      546
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     <212> DNA
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tttaaaatct gatatattgg cataaaagta attgtacata tatatatgaa tgtgatttat
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tttcctttac atcttttgt tgtgtacagc agggcatata cttctcttgt cttggttgga
                                                                      240
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aggatgtctg gttctcgtaa agagtttgat gtgaaacaga ttttgaaaat cagatggagg
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tggtttggtc atcaagcatc atctcctaat tctacagttg acagccagca gggagaattt
                                                                      420
tggaaccgag gacagactgg agcaaacggt gggagaaagt ttttagatcc atgtagccta
                                                                      480
caattgeett tggetteaat tggttacega aggteeagee aactggattt teagaattea
                                                                      540
cettettgge caatggeate cacetetgaa gteeetgeat ttgagtttae ageagaagat
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tgtggcggtg cacattggct ggatagacca gaagtggatg atggcactag tgaagaagaa
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catactatgg agccatgtac atcagatgaa tttttccaag cccttaatca tgccgagcaa
                                                                       780
acatttaaaa aaatggaaaa ctatttgaga cataaacagt tgtgtgatgt aattttagtc
                                                                       840
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                                                                       900
gctggcatgt ttactaat
                                                                       918
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cttctaataa aagctctttg tattctggac gagtcatttt ctgtctggac tacattattt
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tcactctaag attgatccac atttttactg taagcagaaa cttaggaccc aagattataa
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tgctgcagag gatgctgatc gatgtgttct tcttcctgtt cctctttgcg gngtggatgg
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tggcctttgg cgtggccagg caagggatcc ttaggcagaa tgagcagcgc tggaggtgga
                                                                      360
tattecgttc ggtcatctac gagccctacc tggccatgtt cggccaggtg cccagtgacg
                                                                      420
tggatggtac cacgtatgac tttgcccact gcaccttcac tgggaatgag tccaagccac
                                                                      480
tgtgtgtgga gctggatgag cacaacctgc cccggttccc cgagtggatc accatccccc
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tggtgtgcat ctacatgtta tccaccaaca tcctgctggt caacctgctg gtcgccatgt
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gtggcttccc agagactact aggagaactt ggtcctatcg ctgccccac ctggaagctg
                                                                      180
gaettaagga teececaaag aaeggggeaa ttagaaaeet eecaeeeage gaagggataa
                                                                      240
getteteaac teagteecac caetetteat egeaaceete tgagtetgea geagaaacaa
                                                                      300
acatetecaa gttacagagg aggggatgga atccccaagg ggccgagcgg tagccetttt
                                                                      360
aacttataag eetgttgatt ageetataeg agttatttge aegteaagaa aggaagtage
                                                                      420
ctgctccttc ctgcagcgtc ctgctggtgt gacagcacgt ccccaagctc agtgctaacc
                                                                      480
teettattaa acateeeetg etgtgactea gggaaceeae atgggtacte taaaacagte
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tcaaagatcc cagcccttat cttctcccca tatcagagct cggaagccag aaatcttcct
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agtggccatg aactctccat tgctctgctg gctgtggaat gtttgctcag cacaggaagc
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atttaaggag aaagtcaaag tagccaaaag gcaaaccaga tggtggtgga catgtgggtg
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acagagcatc ctgcatttgt tgcctcgggg tgcagcccca aagataaagc cagcagtgtg
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caaatgacaa atgctacccc aceteegeca ggcagecaga gecagggeeg aaggaegegg
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ctcgat
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cgactatete aaageettea tegacgteee aacegtteea geggegeteg tetteetget
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cctggtggga cttctcaatg ccagaggcat caaggagtcc atgcgcgcca ncgtcgtcat
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gacagtegtg gaagteaceg ggetegteet egttgtegte etegegeteg tgeeaggeag
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     <210> 885
     <211> 1696
     <212> DNA
     <213> Homo sapiens
     <400> 885
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                                                                       60
                                                                      120
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gcagccaggc catggagete tetgatgtea ceetcattga gggtgtgggt aatgaggtga
tggtggtggc aggtgtggtg gtgctgattc tagccttggt cctagcttgg ctctctacct
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tgattcactg ccaccgctca cccccagggt cagctgttcc aggcccctca gcctccttgg
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cagcacctgc cactgtctcc ctggtgggag tcaccgtctt cttcagcttc ctagtatttg
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                                                                      1080
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gactottoco agtgtoctgo atgtotgoco ocagoaceca gggotgoctg caagggcago
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tcagcatggc cccagcacaa ctccgtaggg agcctggagt atccttccat ttctcagcca
                                                                      1260
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agacaccagt	adtaacetae	atcgtgtcgg	ggttcctqqc	agegeteete	gcactgttgg	240
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caaatgggcc aaagatgggc ctcctgatga tgattctagg ccaaatattc ctgaatggca
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accaagccaa ggaggctgag atttgggaaa tgctctggag gatgggggtg cagcgggaaa
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                                                                      360
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                                                                      240
ggttcctgtt tcccatgctg tctatagcct acctgatctc acccaggagc aaccttgggc
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                                                                      360
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412

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PCT/US01/02687 WO 01/54477

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					360
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J					546
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PCT/US01/02687

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PCT/US01/02687 WO 01/54477

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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<212> DNA

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<210> 1012 <211> 131 <212> PRT <213> Homo sapiens

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<211> 112 <212> PRT <213> Homo sapiens

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<210> 1016 <211> 68 <212> PRT <213> Homo sapiens

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<210> 1020 <211> 65 <212> PRT <213> Homo sapiens

<210> 1021 <211> 136 <212> PRT <213> Homo sapiens

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<210> 1022 <211> 186 <212> PRT <213> Homo sapiens

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<210> 1023 <211> 186 .<212> PRT <213> Homo sapiens

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<210> 1024 <211> 73 <212> PRT <213> Homo sapiens

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<210> 1026 <211> 67 <212> PRT <213> Homo sapiens

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<210> 1027 <211> 59 <212> PRT <213> Homo sapiens

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<210> 1030 <211> 50 <212> PRT <213> Homo sapiens

<210> 1031 <211> 152 <212> PRT <213> Homo sapiens

<400> 1031 Met Ile Val Tyr Trp Val Leu Met Ser Asn Phe Leu Phe Asn Thr Gly 1 10 15 Lys Phe Ile Phe Asn Phe Ile His His Ile Asn Asp Thr Asp Thr Ile 20 25 Leu Ser Thr Asn Asn Ser Asn Pro Val Ile Cys Pro Ser Ala Gly Ser 35 40 45 Gly Gly His Pro Asp Asn Ser Ser Met Ile Phe Tyr Ala Asn Asp Thr 55 60 Gly Ala Gln Gln Phe Glu Lys Trp Trp Asp Lys Ser Arg Thr Val Pro 75 70 Phe Tyr Leu Val Gly Leu Leu Leu Pro Leu Leu Asn Phe Lys Ser Pro 85 90 Ser Phe Phe Ser Lys Phe Asn Ile Leu Gly Ile Asn Asn Gln Val Ile 105 100 Leu Pro Gly Val Thr Glu Met Pro Gly Tyr Cys Pro Phe Leu Leu Pro 115 120 125 Val Ser Thr Glu Cys Cys Ala Val Ala Thr Ser Tyr Thr Cys Phe Glu 130 135 Glu Lys Asn Ile Gly Gln Cys Cys 150 152

<210> 1032 <211> 1764 <212> PRT <213> Homo sapiens

 <400> 1032

 Met Pro Ser Arg
 Leu Lys
 Ala Leu Gly
 Thr Leu Val
 Ser His Val
 Thr 15

 Leu Arg
 Leu Leu Leu Lys
 Pro Glu Cys
 Val
 Leu Asp
 Lys
 Ser Trp Cys
 Glu

 Glu Glu Leu Ser Val
 Ala Val
 Lys
 Arg
 Ala Val
 Val
 Leu Leu Leu Leu His Thr 35

 His Thr Ile Thr Ser Arg
 Val
 Gly
 Lys
 Gly
 Gly
 Gly
 Gly
 Ala
 Pro Gly
 Ala
 Pro

 Leu Ser Ala
 Pro Ala
 Phe Ser Leu Val
 Pro Phe Leu Lys
 Met Val

Leu Thr Glu Met Pro His His Ser Glu Glu Glu Glu Glu Trp Met Ala Gln Ile Leu Gln Ile Leu Thr Val Gln Ala Gln Leu Arg Ala Ser Pro Asn Thr Pro Pro Gly Arg Val Asp Glu Asn Gly Pro Glu Leu Leu Pro Arg Val Ala Met Leu Arg Leu Leu Thr Trp Val Ile Gly Thr Gly Ser Pro Arg Leu Gln Val Leu Ala Ser Asp Thr Leu Thr Thr Leu Cys Ala Ser Ser Ser Gly Asp Asp Gly Cys Ala Phe Ala Glu Gln Glu Glu Val Asp Val Leu Cys Ala Leu Gln Ser Pro Cys Ala Ser Val Arg Glu 1.80 Thr Val Leu Arg Gly Leu Met Glu Leu His Met Val Leu Pro Ala Pro Asp Thr Asp Glu Lys Asn Gly Leu Asn Leu Leu Arg Arg Leu Trp Val Val Lys Phe Asp Lys Glu Glu Glu Ile Arg Lys Leu Ala Glu Arg Leu Trp Ser Met Met Gly Leu Asp Leu Gln Pro Asp Leu Cys Ser Leu Leu Ile Asp Asp Val Ile Tyr His Glu Ala Ala Val Arg Gln Ala Gly Ala Glu Ala Leu Ser Gln Ala Val Ala Arg Tyr Gln Arg Gln Ala Ala Glu Val Met Gly Arg Leu Met Glu Ile Tyr Gln Glu Lys Leu Tyr Arg Pro Pro Pro Val Leu Asp Ala Leu Gly Arg Val Ile Ser Glu Ser Pro Pro Asp Gln Trp Glu Ala Arg Cys Gly Leu Ala Leu Ala Leu Asn Lys Leu Ser Gln Tyr Leu Asp Ser Ser Gln Val Lys Pro Leu Phe Gln Phe Phe Val Pro Asp Ala Leu Asn Asp Arg His Pro Asp Val Arg Lys Cys Met Leu Asp Ala Ala Leu Ala Thr Leu Asn Thr His Gly Lys Glu Asn Val Asn Ser Leu Leu Pro Val Phe Glu Glu Phe Leu Lys Asn Ala Pro Asn Asp Ala Ser Tyr Asp Ala Val Arg Gln Ser Val Val Leu Met Gly Ser Leu Ala Lys His Leu Asp Lys Ser Asp Pro Lys Val Lys Pro Ile Val Ala Lys Leu Ile Ala Ala Leu Ser Thr Pro Ser Gln Gln Val Gln Glu Ser Val Ala Ser Cys Leu Pro Pro Leu Val Pro Ala Ile Lys Glu Asp Ala Gly Gly Met Ile Gln Arg Leu Met Gln Gln Leu Leu Glu Ser Asp Lys Tyr Ala Glu Arg Lys Gly Ala Ala Tyr Gly Leu Ala Gly Leu Val Lys Gly Leu Gly Ile Leu Ser Leu Lys Gln Gln Glu Met Met Ala Ala Leu Thr Asp Ala Ile Gln Asp Lys Lys Asn Phe Arg Arg Glu Gly Ala Leu Phe Ala Phe Glu Met Leu Cys Thr Met Leu Gly Lys Leu

Phe Glu Pro Tyr Val Val His Val Leu Pro His Leu Leu Cys Phe Gly Asp Gly Asn Gln Tyr Val Arg Glu Ala Ala Asp Asp Cys Ala Lys Ala Val Met Ser Asn Leu Ser Ala His Gly Val Lys Leu Val Leu Pro Ser Leu Leu Ala Ala Leu Glu Glu Glu Ser Trp Arg Thr Lys Ala Gly Ser Val Glu Leu Leu Gly Ala Met Ala Tyr Cys Ala Pro Lys Gln Leu Ser Ser Cys Leu Pro Asn Ile Val Pro Lys Leu Thr Glu Val Leu Thr Asp Ser His Val Lys Val Gln Lys Ala Gly Gln Gln Ala Leu Arg Gln Ile Gly Ser Val Ile Arg Asn Pro Glu Ile Leu Ala Ile Ala Pro Val Leu Leu Asp Ala Leu Thr Asp Pro Ser Arg Lys Thr Gln Lys Cys Leu Gln Thr Leu Leu Asp Thr Lys Phe Val His Phe Ile Asp Ala Pro Ser Leu Ala Leu Ile Met Pro Ile Val Gln Arg Ala Phe Gln Asp Arg Ser Thr Asp Thr Arg Lys Met Ala Ala Gln Ile Ile Gly Asn Met Tyr Ser Leu Thr Asp Gln Lys Asp Leu Ala Pro Tyr Leu Pro Ser Val Thr Pro Gly Leu Lys Ala Ser Leu Leu Asp Pro Val Pro Glu Val Arg Thr Val Ser Ala Lys Ala Leu Gly Ala Met Val Lys Gly Met Gly Glu Ser Cys Phe Glu Asp Leu Leu Pro Trp Leu Met Glu Thr Leu Thr Tyr Glu Gln Ser Ser Val Asp Arg Ser Gly Ala Ala Gln Gly Leu Ala Glu Val Met Ala Gly Leu Gly Val Glu Lys Leu Glu Lys Leu Met Pro Glu Ile Val Ala Thr Ala Ser Lys Val Asp Ile Ala Pro His Val Arg Asp Gly Tyr Ile Met Met Phe Asn Tyr Leu Pro Ile Thr Phe Gly Asp Lys Phe Thr Pro Tyr Val Gly Pro Ile Ile Pro Cys Ile Leu Lys Ala Leu Ala Asp Glu Asn Glu Phe Val Arg Asp Thr Ala Leu Arg Ala Gly Gln Arg Val Ile Ser Met Tyr Ala Glu Thr Ala Ile Ala Leu Leu Leu Pro Gln Leu Glu Gln Gly Leu Phe Asp Asp Leu Trp Arg Ile Arg Phe Ser Ser Val Gln Leu Leu Gly Asp Leu Leu Phe His Ile Ser Gly Val Thr Gly Lys Met Thr Thr Glu Thr Ala Ser Glu Asp Asp Asn Phe Gly Thr Ala Gln Ser Asn Lys Ala Ile Ile Thr Ala Leu Gly Val Glu Arg Arg Asn Arg Val Leu Ala Gly Leu Tyr Met Gly Arg Ser Asp Thr Gln Leu Val Val Arg Gln Ala Ser Leu His Val Trp Lys Ile Val Val Ser Asn Thr Pro Arg Thr Leu Arg Glu Ile Leu Pro Thr Leu Phe Gly Leu Leu Leu Gly

1020 1015 Phe Leu Ala Ser Thr Cys Ala Asp Lys Arg Thr Ile Ala Ala Arg Thr 1030 1035 Leu Gly Asp Leu Val Arg Lys Leu Gly Glu Lys Ile Leu Pro Glu Ile 1050 1045 Ile Pro Ile Leu Glu Glu Gly Leu Arg Ser Gln Lys Ser Asp Glu Arg 1060 1065 1070 Gln Gly Val Cys Ile Gly Leu Ser Glu Ile Met Lys Ser Thr Ser Arg 1075 1080 1085 Asp Ala Val Leu Tyr Phe Ser Glu Ser Leu Val Pro Thr Ala Arg Lys 1090 $$ 1095 $$ 1100 Ala Leu Cys Asp Pro Leu Glu Glu Val Arg Glu Ala Ala Lys Thr 1105 1110 1115 Phe Glu Gln Leu His Ser Thr Ile Gly His Gln Ala Leu Glu Asp Ile 1125 1130 1135 Leu Pro Phe Leu Leu Lys Gln Leu Asp Asp Glu Glu Val Ser Glu Phe 1150 1140 1145 Ala Leu Asp Gly Leu Lys Gln Val Met Ala Ile Lys Ser Arg Val Val 1155 1160 1165 Leu Pro Tyr Leu Val Pro Lys Leu Thr Thr Pro Pro Val Asn Thr Arg 1170 1175 1180 Val Leu Ala Phe Leu Ser Ser Val Ala Gly Asp Ala Leu Thr Arg His 1185 . 1190 1195 Leu Gly Val Ile Leu Pro Ala Val Met Leu Ala Leu Lys Glu Lys Leu 1210 1215 1205 Gly Thr Pro Asp Glu Gln Leu Glu Met Ala Asn Cys Gln Ala Val Ile 1220 1225 1230 Leu Ser Val Glu Asp Asp Thr Gly His Arg Ile Ile Ile Glu Asp Leu 1235 1240 1245 Leu Glu Ala Thr Arg Ser Pro Glu Val Gly Met Arg Gln Ala Ala Ala 1250 1255 1260 Ile Ile Leu Asn Ile Tyr Cys Ser Arg Ser Lys Ala Asp Tyr Thr Ser 1265 1270 1275 His Leu Arg Ser Leu Val Ser Gly Leu Ile Arg Leu Phe Asn Asp Ser 1295 1285 1290 Ser Pro Val Val Leu Glu Glu Ser Trp Asp Ala Leu Asn Ala Ile Thr 1300 1305 1310 Lys Lys Leu Asp Ala Gly Asn Gln Leu Ala Leu Ile Glu Glu Leu His 1315 1320 1325 Lys Glu Ile Arg Leu Ile Gly Asn Glu Ser Lys Gly Glu His Val Pro 1330 1335 1340 Gly Phe Cys Leu Pro Lys Lys Gly Val Thr Ser Ile Leu Pro Val Leu 1345 1350 1355 Arg Glu Gly Val Leu Thr Gly Ser Pro Glu Gln Lys Glu Glu Ala Ala 1370 1365 Lys Ala Leu Gly Leu Val Ile Arg Leu Thr Ser Ala Asp Ala Leu Arg 1380 1385 1390 Pro Ser Val Val Ser Ile Thr Gly Pro Leu Ile Arg Ile Leu Gly Asp 1395 1400 1405 Arg Phe Ser Trp Asn Val Lys Ala Ala Leu Leu Glu Thr Leu Ser Leu 1410 1415 1420 Leu Leu Ala Lys Val Gly Ile Ala Leu Lys Pro Phe Leu Pro Gln Leu 1430 1435 Gln Thr Thr Phe Thr Lys Ala Leu Gln Asp Ser Asn Arg Gly Val Arg 1450 1445 1455 Leu Lys Ala Ala Asp Ala Leu Gly Lys Leu Ile Ser Ile His Ile Lys 1460 1465 1470 Val Asp Pro Leu Phe Thr Glu Leu Leu Asn Gly Ile Arg Ala Met Glu 1480 1485

Asp Pro Gly Val Arg Asp Thr Met Leu Gln Ala Leu Arg Phe Val Ile 1495 1500 Gln Gly Ala Gly Ala Lys Val Asp Ala Val Ile Arg Lys Asn Ile Val 1505 1510 1515 Ser Leu Leu Ser Met Leu Gly His Asp Glu Asp Asn Thr Arg Ile 1525 1530 1535 Ser Ser Ala Gly Cys Leu Gly Glu Leu Cys Ala Phe Leu Thr Glu Glu 1540 1545 1550 Glu Leu Ser Ala Val Leu Gln Gln Cys Leu Leu Ala Asp Val Ser Gly 1555 1560 1565 Ile Asp Trp Met Val Arg His Gly Arg Ser Leu Ala Leu Ser Val Ala 1575 1580 Val Asn Val Ala Pro Gly Arg Leu Cys Ala Gly Arg Tyr Ser Ser Asp 1590 1595 1600 Val Gln Glu Met Ile Leu Ser Ser Ala Thr Ala Asp Arg Ile Pro Ile 1605 1610 1615 Ala Val Ser Gly Val Arg Gly Met Gly Phe Leu Met Arg His His Ile 1620 1625 1630 Glu Thr Gly Gly Gln Leu Pro Ala Lys Leu Ser Ser Leu Phe Val 1635 1640 1645 Lys Cys Leu Gln Asn Pro Ser Ser Asp Ile Arg Leu Val Ala Glu Lys 1650 1655 1660 Met Ile Trp Trp Ala Asn Lys Asp Pro Leu Pro Pro Leu Asp Pro Gln 1670 1675 1680 Ala Ile Lys Pro Ile Leu Lys Ala Leu Leu Asp Asn Thr Lys Asp Lys 1685 1690 1695 Asn Thr Val Val Arg Ala Tyr Ser Asp Gln Ala Ile Val Asn Leu Leu 1700 1705 1710 Lys Met Arg Gln Gly Glu Glu Val Phe Gln Ser Leu Ser Lys Ile Leu 1715 1720 1725 Asp Val Ala Ser Leu Glu Val Leu Asn Glu Val Asn Arg Arg Ser Leu 1730 1735 1740 Lys Lys Leu Ala Ser Gln Ala Asp Ser Thr Glu Gln Val Asp Asp Thr 1750 1755 Ile Leu Thr * 1763

<210> 1033 <211> 151 <212> PRT <213> Homo sapiens

<400> 1033

Met Asn Arg Arg Ala Ser Gln Met Leu Leu Met Phe Leu Leu Ala Ile 5 10 Cys Leu Leu Ala Ile Ile Phe Val Pro Gln Glu Met Gln Met Leu Arg 20 25 3.0 Glu Val Leu Ala Thr Leu Gly Leu Gly Ala Ser Ala Leu Ala Asn Thr 35 40 45 Leu Ala Phe Ala His Gly Asn Glu Val Ile Pro Thr Ile Ile Arg Ala 55 60 Arg Ala Met Gly Ile Asn Ala Thr Phe Ala Asn Ile Ala Gly Ala Leu 70 Ala Pro Leu Met Met Ile Leu Ser Val Tyr Ser Pro Pro Leu Pro Trp 85 90 Ile Ile Tyr Gly Val Phe Pro Phe Ile Ser Gly Phe Ala Phe Leu Leu

<210> 1034 <211> 149 <212> PRT <213> Homo sapiens

<400> 1034 Met Ala Leu Leu Pro Arg Trp Phe Arg Glu Ala Pro Val Leu Phe 10 Ser Thr Gly Trp Ser Pro Leu Asp Val Leu Leu His Ser Leu Leu Thr 20 25 Gln Pro Ile Phe Leu Ala Gly Leu Ser Gly Phe Leu Leu Glu Asn Thr 35 40 45 Ile Pro Gly Thr Gln Leu Glu Arg Gly Leu Gly Gln Gly Leu Pro Ser , 50 55 60 Pro Phe Thr Ala Gln Glu Ala Arg Met Pro Gln Lys Pro Arg Glu Lys 70 Ala Ala Gln Val Tyr Arg Leu Pro Phe Pro Ile Gln Asn Leu Cys Pro 85 90 Cys Ile Pro Gln Pro Leu His Cys Leu Cys Pro Leu Pro Glu Asp Pro 100 105 Gly Asp Glu Glu Gly Gly Ser Ser Glu Pro Glu Glu Met Ala Asp Leu 115 120 125 Leu Pro Gly Ser Gly Glu Pro Cys Pro Glu Ser Thr Arg Glu Gly Val 130 135 Arg Ser Gln Lys * 145 148

<210> 1035 <211> 88 <212> PRT <213> Homo sapiens

<400> 1035 Met Gly Ile Ala Leu Leu Gln Ile Phe Gly Ile Cys Leu Ala Gln Asn 10 Leu Val Ser Asp Ile Lys Ala Val Lys Ala Asn Trp Ser Lys Trp Asn 25 20 Asp Asp Phe Glu Asn His Trp Leu Thr Pro Thr Ile Ser Glu Val Leu 40 Ser Thr Ala Gly Pro Gln Gln Asn Ser Leu Thr Gly Ala Pro Gly Pro 55 60 Ala Pro Pro Ser Arg His Val Phe Phe Gly Leu Gly Gly Leu Tyr Pro 70 75 Glu Pro Thr Phe Lys Asn Trp * 85

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<210> 1036
<211> 96
<212> PRT
<213> Homo sapiens
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<400> 1036 Met Val Val Leu Ile Pro Val Ser Trp Val Ala Asn Ala Ile Ile Arg 5 10 Asp Phe Tyr Asn Ser Ile Val Asn Val Ala Gln Lys Arg Glu Leu Gly 20 25 Glu Ala Leu Tyr Leu Gly Trp Thr Thr Ala Leu Val Leu Ile Val Gly 40 Gly Ala Leu Phe Cys Cys Val Phe Cys Cys Asn Glu Lys Ser Ser Ser 60 50 55 Tyr Arg Tyr Ser Ile Pro Ser His Arg Thr Thr Gln Lys Ser Tyr His 70 75 Thr Gly Lys Lys Ser Pro Ser Val Tyr Ser Arg Ser Gln Tyr Val *

<210> 1037 <211> 139 <212> PRT <213> Homo sapiens

<400> 1037 Met Ala Leu Ser Trp Met Thr Ile Val Val Pro Leu Leu Thr Phe Glu Ile Leu Leu Val His Lys Leu Asp Gly His Asn Ala Phe Ser Cys Ile 25 Pro Ile Phe Val Pro Leu Trp Leu Ser Leu Ile Thr Leu Met Ala Thr 40 45 35 Thr Phe Gly Gln Lys Gly Gly Asn His Trp Trp Phe Gly Ile Arg Lys 55 Asp Phe Cys Gln Phe Leu Leu Glu Ile Phe Pro Phe Leu Arg Glu Tyr 70 75 Gly Asn Ile Ser Tyr Asp Leu His His Glu Asp Asn Glu Glu Thr Glu 85 90 Glu Thr Pro Val Pro Glu Pro Pro Lys Ile Ala Pro Met Phe Arg Lys 100 105 110 Lys Ala Arg Val Val Ile Thr Gln Ser Pro Gly Lys Tyr Val Leu Pro 115 120 125 Pro Pro Lys Leu Asn Ile Glu Met Pro Asp 130 135 138

<210> 1038 <211> 64 <212> PRT <213> Homo sapiens

<210> 1039 <211> 286 <212> PRT <213> Homo sapiens

<400> 1039 Met Met Leu Gly Pro Val Thr Leu His Leu Val Gly His Leu Leu Ala 10 Phe Leu Asp Leu Cys Pro Arg Gly Pro Ile His Ser Ile Leu Pro 20 25 Met Thr Phe Glu Ala Val Lys Gln Asp His Gly Phe Met Leu Tyr Arg 3.5 40 Thr Tyr Met Thr His Thr Ile Phe Glu Pro Thr Pro Phe Trp Val Pro 60 Asn Asn Gly Val His Asp Arg Ala Tyr Val Met Val Asp Gly Val Phe 75 Gln Gly Val Val Glu Arg Asn Met Arg Asp Lys Leu Phe Leu Thr Gly 85 90 Lys Leu Gly Ser Lys Leu Asp Ile Leu Val Glu Asn Met Gly Arg Leu 100 105 Ser Phe Gly Ser Asn Ser Ser Asp Phe Lys Gly Leu Leu Lys Pro Pro 115 120 125 Ile Leu Gly Gln Thr Ile Leu Thr Gln Trp Met Met Phe Pro Leu Lys 135 140 Ile Asp Asn Leu Val Lys Trp Trp Phe Pro Leu Gln Leu Pro Lys Trp 150 155 Pro Tyr Pro Gln Ala Pro Ser Gly Pro Thr Phe Tyr Ser Lys Thr Phe 170 Pro Ile Leu Gly Ser Val Gly Asp Thr Phe Leu Tyr Leu Pro Gly Trp 180 18.5 Thr Lys Gly Gln Val Trp Ile Asn Gly Phe Asn Leu Gly Arg Tyr Trp 200 205 Thr Lys Gln Gly Pro Gln Gln Thr Leu Tyr Val Pro Arg Phe Leu Leu 215 220 Phe Pro Arg Gly Ala Leu Asn Lys Ile Thr Leu Leu Glu Leu Glu Asp 235 230 240 Val Pro Leu Gln Pro Gln Val Gln Phe Leu Asp Lys Pro Ile Leu Asn 250 Ser Thr Ser Thr Leu His Arg Thr His Ile Asn Ser Leu Ser Ala Asp 260 265 270 Thr Leu Ser Ala Ser Glu Pro Met Glu Leu Ser Gly His * 275

<210> 1040

<211> 96 <212> PRT <213> Homo sapiens

Phe Thr Ile Ile Thr Gly Phe Phe Gln Val Thr Ser Cys Arg Leu *

90

<210> 1041 <211> 64 <212> PRT <213> Homo sapiens

<210> 1042 <211> 415 <212> PRT <213> Homo sapiens

<400> 1042 Met Asn Glu Thr Gly Val Ile Val Trp Tyr Leu Ala Leu Cys Leu Leu Leu Ala Trp Leu Ile Val Gly Ala Ala Leu Phe Lys Gly Ile Lys Ser 25 Ser Gly Lys Val Val Tyr Phe Thr Ala Leu Phe Pro Tyr Val Val Leu 35 40 Leu Ile Leu Leu Val Arg Gly Ala Thr Leu Glu Gly Ala Ser Lys Gly 55 60 Ile Ser Tyr Tyr Ile Gly Ala Gln Ser Asn Phe Thr Lys Leu Lys Glu 70 75 Ala Glu Val Trp Lys Asp Ala Ala Thr Gln Ile Phe Tyr Ser Leu Ser 90 Val Ala Trp Gly Gly Leu Val Ala Leu Ser Ser Tyr Asn Lys Phe Lys

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100
                         105
Asn Asn Cys Phe Ser Asp Ala Ile Val Val Cys Leu Thr Asn Cys Leu
          120
    115
                                 125
Thr Ser Val Phe Ala Gly Phe Ala Ile Phe Ser Ile Leu Gly His Met
                   135
                                  140
Ala His Ile Ser Gly Lys Glu Val Ser Gln Val Val Lys Ser Gly Phe
                       155
Asp Leu Ala Phe Ile Ala Tyr Pro Glu Ala Leu Ala Gln Leu Pro Gly
           165
                  170
Gly Pro Phe Trp Ser Ile Leu Phe Phe Phe Met Leu Leu Thr Leu Gly
       180
                 185
                                        1.90
Leu Asp Ser Gln Phe Ala Ser Ile Glu Thr Ile Thr Thr Ile Gln
              200
     195
                             205
Asp Leu Phe Pro Lys Val Met Lys Lys Met Arg Val Pro Ile Thr Leu
               215 220
Gly Cys Cys Leu Val Leu Phe Leu Leu Gly Leu Val Cys Val Thr Gln
             230 235
Ala Gly Ile Tyr Trp Val His Leu Ile Asp His Phe Cys Ala Gly Trp
           245
                            250 255
Gly Ile Leu Ile Ala Ala Ile Leu Glu Leu Val Gly Ile Ile Trp Ile
         260
                        265
                                         270
Tyr Gly Gly Asn Arg Phe Ile Glu Asp Thr Glu Met Met Ile Gly Ala
             280
Lys Arg Trp Ile Phe Trp Leu Trp Trp Arg Ala Cys Trp Phe Val Ile
         295
Thr Pro Ile Leu Leu Ile Ala Ile Phe Ile Trp Ser Leu Val Gln Phe
305 310
                       315
His Arg Pro Asn Tyr Gly Ala Ile Pro Tyr Pro Asp Trp Gly Val Ala
           325
                          330 335
Leu Gly Trp Cys Met Ile Val Phe Cys Ile Ile Trp Ile Pro Ile Met
         340
                         345
                                     350
Ala Ile Ile Lys Ile Ile Gln Ala Lys Gly Asn Ile Phe Gln Arg Leu
                     360
                               365
Ile Ser Cys Cys Arg Pro Ala Ser Asn Trp Gly Pro Tyr Leu Glu Gln
          375
                                 380
His Arg Gly Glu Arg Tyr Lys Asp Met Val Asp Pro Lys Lys Glu Ala
        390 395
Asp His Glu Ile Pro Thr Val Ser Gly Ser Arg Lys Pro Glu *
            405
                    410
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<210> 1043 <211> 48 <212> PRT <213> Homo sapiens

<210> 1044

<211> 146 <212> PRT <213> Homo sapiens

<400> 1044 Met Leu Phe Ser Ser Met Thr Leu Arg Leu Ser Arg Cys Ser Cys Ser 5 10 Ile Leu Leu Phe Trp Ala Ser Ala Ala Cys Met Phe Pro Ser Ser Arg 20 Tyr Leu Trp Ser Gly Arg Ser Leu Val Ser Val Glu Gly Ser Asp Arg 40 Phe Ser Ser Ala Val Ser Ser Phe Ser Ser Lys Ala Asn Trp Val Lys 55 Pro Lys Phe Arg Ser Trp Ser Gly Gly Ile Glu Leu Gly Phe Gln Met 70 . 75 His Trp Pro Pro Gly Val Gly Pro Arg Tyr Ser Pro Ser Cys His Phe 85 90 Pro Lys Ser Arg Trp Arg Thr Arg Pro Leu Arg Leu Ser Thr Ala Pro 100 105 110 Cys Thr Ser Trp Thr Leu Glu Leu Gln Tyr Leu Ala Leu Gln Lys Val 115 120 125 Ile Leu Gln Trp Gln Glu Leu Ser Cys Val Phe Arg Met Ser Thr Ser 135 140 Pro * 145

<210> 1045 <211> 53 <212> PRT <213> Homo sapiens

<210> 1046 <211> 407 <212> PRT <213> Homo sapiens

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40
        35
 Ser Arg His Ala Ala Glu Leu Arg Asp Phe Lys Asn Lys Met Leu Pro
                      55
                                        60
Leu Leu Glu Val Ala Glu Lys Glu Arg Glu Ala Leu Arg Thr Glu Ala
Asp Thr Ile Ser Gly Arg Val Asp Arg Leu Glu Arg Glu Val Asp Tyr
               85
                                90
Leu Glu Thr Gln Asn Pro Ala Leu Pro Cys Val Glu Phe Asp Glu Lys
          100
                   105
Val Thr Gly Gly Pro Gly Thr Lys Gly Lys Gly Arg Arg Asn Glu Lys
     115
                        120
                                        125
Tyr Asp Met Val Thr Asp Cys Gly Tyr Thr Ile Ser Gln Val Arg Ser
                     135
                                       140
Met Lys Ile Leu Lys Arg Phe Gly Gly Pro Ala Gly Leu Trp Thr Lys
                150
                                155
Asp Pro Leu Gly Gln Thr Glu Lys Ile Tyr Val Leu Asp Gly Thr Gln
             165
                              170
                                         175
Asn Asp Thr Ala Phe Val Phe Pro Arg Leu Arg Asp Phe Thr Leu Ala
          180
                            185
                                       190
Met Ala Ala Arg Lys Ala Ser Arg Val Arg Val Pro Phe Pro Trp Val
                       200
                                           205
Gly Thr Gly Gln Leu Val Tyr Gly Gly Phe Leu Tyr Phe Ala Arg Arg
                     215
Pro Pro Gly Arg Pro Gly Gly Gly Glu Met Glu Asn Thr Leu Gln
               230
                                    235
Leu Ile Lys Phe His Leu Ala Asn Arg Thr Val Val Asp Ser Ser Val
             245
                       250
Phe Pro Ala Glu Gly Leu Ile Pro Pro Tyr Gly Leu Thr Ala Asp Thr
                           265
Tyr Ile Asp Leu Ala Ala Asp Glu Glu Gly Leu Trp Ala Val Tyr Ala
                        280
                                         285
Thr Arg Glu Asp Asp Arg His Leu Cys Leu Ala Lys Leu Asp Pro Gln
                     295
                                      300
Thr Leu Asp Thr Glu Gln Gln Trp Asp Thr Pro Cys Pro Arg Glu Asn
                310
                                    315
Ala Glu Ala Ala Phe Val Ile Cys Gly Thr Leu Tyr Val Val Tyr Asn
       325
                               330
                                        335
Thr Arg Pro Ala Ser Arg Ala Arg Ile Gln Cys Ser Phe Asp Ala Ser
                                    350
        340
                            345
Gly Thr Leu Thr Pro Glu Arg Ala Ala Leu Pro Tyr Phe Pro Arg Arg
            360
                                          365
Tyr Gly Ala His Ala Ser Leu Arg Tyr Asn Pro Arg Glu Arg Gln Leu
             375
                                      380
Tyr Ala Trp Asp Asp Gly Tyr Gln Ile Val Tyr Lys Leu Glu Met Arg
          390
Lys Lys Glu Glu Glu Val *
             405 406
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<210> 1047 <211> 268 <212> PRT <213> Homo sapiens

Tyr Leu Leu Phe Met Ile Gly Tyr Ala Ser Ala Leu Val Ser Leu Leu 25 Asn Pro Cys Ala Asn Met Lys Val Cys Asn Glu Asp Gln Thr Asn Cys 35 40 Thr Val Pro Thr Tyr Pro Ser Cys Arg Asp Ser Glu Thr Phe Ser Thr 55 60 Phe Leu Leu Asp Leu Phe Lys Leu Thr Ile Gly Met Gly Asp Leu Glu 75 70 Met Leu Ser Ser Thr Lys Tyr Pro Val Val Phe Ile Ile Leu Leu Val 85 90 Thr Tyr Ile Ile Leu Thr Phe Val Leu Leu Leu Asn Met Leu Ile Ala 100 105 Leu Met Gly Glu Thr Val Gly Gln Val Ser Lys Glu Ser Lys His Ile 120 115 125 Trp Lys Leu Gln Trp Ala Thr Thr Ile Leu Asp Ile Glu Arg Ser Phe 130 135 140 Pro Val Phe Leu Arg Lys Ala Phe Arg Ser Gly Glu Met Val Thr Val 150 155 Gly Lys Ser Ser Asp Gly Thr Pro Asp Arg Arg Trp Cys Phe Arg Val 170 Asp Glu Val Asn Trp Ser His Trp Asn Gln Asn Leu Gly Ile Ile Asn 180 185 190 Glu Asp Pro Gly Lys Asn Glu Thr Tyr Gln Tyr Tyr Gly Phe Ser His 195 200 205 Thr Val Gly Arg Leu Arg Arg Asp Arg Trp Ser Ser Val Val Pro Arg 215 220 Val Val Glu Leu Asn Lys Asn Ser Asn Pro Asp Glu Val Val Pro 225 230 235 Leu Asp Ser Met Gly Asn Pro Arg Cys Asp Gly His Gln Gln Gly Tyr 245 250 Pro Arg Lys Trp Arg Thr Asp Asp Ala Pro Leu * 265 267

<210> 1048 <211> 59 <212> PRT <213> Homo sapiens

<210> 1049 <211> 77 <212> PRT <213> Homo sapiens

 <400> 1049

 Met Arg Cys Arg Cys Arg Cys Cys Leu Cys Ser Ser Cys Phe Trp Gly Leu Trp 1

 15

 Asp Pro Cys Pro Lys Ser Val Trp Ser Pro Trp Ser Ser Ser Ser Leu 20

 20

 25

 30

 Gly Ala Phe Ser Val Gly Ser Glu Leu Ala Ser Ala Ala Ser Ser Leu 45

 Ser Pro Pro Arg Thr Ala Pro Arg Ser Thr Ala Lys 50

 55

 Leu Cys Leu Arg Trp Ser Arg Pro Gly Asn Cys Gly *

 60

 + Trp Ser Arg Pro Gly Asn Cys Gly *

 75

<210> 1050 <211> 474 <212> PRT <213> Homo sapiens

<400> 1050 Met Arg Ala Leu Val Leu Leu Gly Cys Leu Leu Ala Ser Leu Leu Phe 10 Ser Gly Gln Ala Glu Glu Thr Glu Asp Ala Asn Glu Glu Ala Pro Leu 25 Arg Asp Arg Ser His Ile Glu Lys Thr Leu Met Leu Asn Glu Asp Lys 35 40 45 Pro Ser Asp Asp Tyr Ser Ala Val Leu Gln Arg Leu Arg Lys Ile Tyr 55 60 His Ser Ser Ile Lys Pro Leu Glu Gln Ser Tyr Lys Tyr Asn Glu Leu 70 75 Arg Gln His Glu Ile Thr Asp Gly Glu Ile Thr Ser Lys Pro Met Val Leu Phe Leu Gly Pro Trp Ser Val Gly Lys Ser Thr Met Ile Asn Tyr 100 105 110 Leu Leu Gly Leu Glu Asn Thr Arg Tyr Gln Leu Tyr Thr Gly Ala Glu 1.15 120 125 Pro Thr Thr Ser Glu Phe Thr Val Leu Met His Gly Pro Lys Leu Lys 135 140 Thr Ile Glu Gly Ile Val Met Ala Ala Asp Ser Ala Arg Ser Phe Ser 150 155 Pro Leu Glu Lys Phe Gly Gln Asn Phe Leu Glu Lys Leu Ile Gly Ile 165 170 175 Glu Val Pro His Lys Leu Leu Glu Arg Val Thr Phe Val Asp Thr Pro 190 185 Gly Ile Ile Glu Asn Arg Lys Gln Gln Glu Arg Gly Tyr Pro Phe Asn 195 200 205 Asp Val Cys Gln Trp Phe Ile Asp Arg Ala Asp Leu Ile Phe Val Val 215 220 Phe Asp Pro Thr Lys Leu Asp Val Gly Leu Glu Leu Glu Met Leu Phe 230 235 Arg Gln Leu Lys Gly Arg Glu Ser Gln Ile Arg Ile Ile Leu Asn Lys 245 250 Ala Asp Asn Leu Ala Thr Gln Met Leu Met Arg Val Tyr Gly Ala Leu 265 270 Phe Trp Ser Leu Ala Pro Leu Ile Asn Val Thr Glu Pro Pro Arg Val 275 280 285 Tyr Val Ser Ser Phe Trp Pro Gln Glu Tyr Lys Pro Asp Thr His Gln 290 295 300

Glu Leu Phe Leu Gln Glu Glu Ile Ser Leu Leu Glu Asp Leu Asn Gln .310 315 Val Ile Glu Asn Arg Leu Glu Asn Lys Ile Ala Phe Ile Arg Gln His 330 325 Ala Ile Arg Val Arg Ile His Ala Leu Leu Val Asp Arg Tyr Leu Gln 340 345 Thr Tyr Lys Asp Lys Met Thr Phe Phe Ser Asp Gly Glu Leu Val Phe 360 365 Lys Asp Ile Val Glu Asp Pro Asp Lys Phe Tyr Ile Phe Lys Thr Ile 375 380 Leu Ala Lys Thr Asn Val Ser Lys Phe Asp Leu Pro Asn Arg Glu Ala 390 395 Tyr Lys Asp Phe Phe Gly Ile Asn Pro Ile Ser Ser Phe Lys Leu Leu 405 410 415 Ser Gln Gln Cys Ser Tyr Met Gly Gly Cys Phe Leu Glu Lys Ile Glu 420 425 430 Arg Ala Ile Thr Gln Glu Leu Pro Gly Leu Leu Gly Ser Leu Gly Leu 435 440 445 Gly Lys Asn Pro Gly Ala Leu Asn Cys Asp Lys Thr Gly Cys Ser Glu 455 Thr Pro Lys Asn Arg Tyr Arg Lys His * 470

<210> 1051 <211> 47 <212> PRT <213> Homo sapiens

<210> 1052 <211> 233 <212> PRT <213> Homo sapiens

90 Gln Ala Glu Asp Glu Ala Asp Tyr Tyr Cys Cys Ser Tyr Ala Gly Arg 100 105 Thr Thr Trp Val Phe Gly Gly Gly Thr Lys Leu Thr Val Leu Gly Gln 115 120 125 Pro Lys Ala Ala Pro Ser Val Thr Leu Phe Pro Pro Ser Ser Glu Glu 130 135 140 Leu Gln Ala Asn Lys Ala Thr Leu Val Cys Leu Ile Ser Asp Phe Tyr 155 160 150 Pro Gly Ala Val Thr Val Ala Trp Lys Ala Asp Ser Ser Pro Val Lys 165 170 Ala Gly Val Glu Thr Thr Thr Pro Ser Lys Gln Ser Asn Asn Lys Tyr 180 185 190 Ala Ala Ser Ser Tyr Leu Ser Leu Thr Pro Glu Gln Trp Lys Ser His 200 195 205 Arg Ser Tyr Ser Cys Gln Val Thr His Glu Gly Ser Thr Val Glu Lys 210 215 220 Thr Val Ala Pro Thr Glu Cys Ser 230 232

<210> 1053 <211> 147 <212> PRT <213> Homo sapiens

<400> 1053 Met Gly Ala Asp Arg Gly Pro His Val Val Leu Trp Thr Leu Ile Cys 1 5 10 Leu Pro Val Val Phe Ile Leu Ser Phe Val Val Ser Phe Tyr Tyr Gly 20 25 Thr Ile Thr Trp Tyr Asn Ile Phe Leu Val Tyr Asn Glu Glu Arg Thr 35 40 Phe Trp His Lys Ile Ser Tyr Cys Pro Cys Leu Val Leu Phe Tyr Pro 55 60 Val Leu Ile Met Ala Met Ala Ser Ser Leu Gly Leu Tyr Ala Ala Val 70 75 Val Gln Leu Ser Trp Ser Trp Glu Ala Trp Trp Gln Ala Ala Arg Asp 85 90 95 85 90 Met Glu Lys Gly Phe Cys Gly Trp Leu Cys Ser Lys Leu Gly Leu Glu 105 110 Asp Cys Ser Pro Tyr Ser Ile Val Glu Leu Leu Glu Ser Asp Asn Ile 115 120 125 Ser Ser Thr Leu Ser Asn Lys Asp Pro Ile Gln Glu Val Glu Thr Ser 135 140 Thr Val * 145 146

<210> 1054 <211> 123 <212> PRT <213> Homo sapiens

<400> 1054

Met Tyr Val Thr Leu Val Phe Arg Val Lys Gly Ser Arg Leu Val Lys 10 Pro Ser Leu Cys Leu Ala Leu Leu Cys Pro Ala Phe Leu Val Gly Val 20 . 25 Val Arg Val Ala Glu Tyr Arg Asn His Trp Ser Asp Val Leu Ala Gly 40 45 Phe Leu Thr Gly Ala Ala Ile Ala Thr Phe Leu Val Thr Cys Val Val 55 60 His Asn Phe Gln Ser Arg Pro Pro Ser Gly Arg Arg Leu Ser Pro Trp 70 75 Glu Asp Leu Gly Gln Ala Pro Thr Met Asp Ser Pro Leu Glu Lys Asn 85 Pro Arg Ser Ala Gly Arg Ile Arg His Arg His Gly Ser Pro His Pro 105 110 Ser Arg Arg Thr Ala Pro Ala Val Ala Thr * 115 120 122

<210> 1055 <211> 122 <212> PRT <213> Homo sapiens

<400> 1055 Met Leu Thr Cys Leu Phe Ser Phe Gln Gly Cys Trp Arg Ala Arg Gly 5 10 Trp Gln Arg Leu Cys Glu Gly Arg Arg Gly Trp Pro Gly Val Gly Gln 20 25 Arg Thr Leu Lys Val Ser Glu Pro Ala Pro Leu Arg Val Gly Arg Ala 40 Leu Pro Gln Ala Leu Leu Gly Ala Arg Pro His Cys Val Phe Pro Gly 60 55 Gly Glu Val Leu Gly Val Glu Ala Ala Phe Gly Ser Ser Phe Ile Leu 70 Ser Thr Phe Phe Leu His Gln Pro Leu Phe Phe Pro Gly Pro Lys Leu 85 90 Arg Ala Thr Gln Tyr Leu Ile Ser Ser Asp Pro Thr His Leu Pro Ala 100 105 Gly Arg Gly Pro Asn Ser Val Ser Met * 115 120 121

<210> 1056 <211> 51 <212> PRT <213> Homo sapiens

50

<210> 1057 <211> 260 <212> PRT <213> Homo sapiens

<400> 1057 Met Glu Ala Pro Ala Gln Leu Leu Phe Leu Leu Leu Trp Leu Pro 10 Asp Thr Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Ala Thr Leu Ser 20 25 Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln Ser 40 Val Gly Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ala Pro 55 60 Arg Pro Leu Ile Tyr Asp Ala Ser Asn Arg Ala Thr Gly Ile Pro Ala 70 75 Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile Ser 85 90 Ser Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln His Arg Asp 105 Asn Trp Pro Pro Gly Ala Thr Phe Gly Gly Gly Thr Lys Val Glu Ile 120 125 Lys His Thr Thr Gly Glu Ile Val Leu Thr Gln Ala Pro Gly Thr Leu 135 140 Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser Gln 150 155 Thr Ile Gly Ser Thr Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly Lys 165 170 175 Ala Pro Lys Leu Leu Ile Tyr Trp Phe Ile Gln Phe Ala Lys Arg Gly 180 185 Pro Ile Lys Val Gln Cys His Arg Val Arg Gly Gln Thr Ser Leu Ser 195 200 205 Pro Ser Ala Asp Trp Ser Leu Lys Ile Leu Gln Cys Ile Ser Val Thr 210 220 Asn Met Gly Ala His Pro Thr Leu Leu Ala Glu Gly Pro Arg Trp Arg 230 235 Ser Asn Glu Leu Trp Leu His His Leu Ser Ser Ser Arg His Leu 245 . 250 Met Ser Ser * 259

<210> 1058 <211> 52 <212> PRT <213> Homo sapiens

Trp Arg Pro Cys Leu Pro Arg Leu Arg Met Arg Val Leu Val Leu Leu 35 40 45

Ile Trp Ser * 50 51

<210> 1059 <211> 97 <212> PRT <213> Homo sapiens

<210> 1060 <211> 99 <212> PRT <213> Homo sapiens

<400> 1060 Met Asn Lys His Phe Leu Phe Leu Phe Leu Leu Tyr Cys Leu Ile Ala 5 10 Ala Val Thr Ser Leu Gln Cys Ile Thr Cys His Leu Arg Thr Arg Thr 20 25 Asp Arg Cys Arg Arg Gly Phe Gly Val Cys Thr Ala Gln Lys Gly Glu 35 40 Ala Cys Met Leu Leu Arg Ile Tyr Gln Arg Asn Thr Leu Gln Ile Ser 60 Tyr Met Val Cys Gln Lys Phe Cys Arg Asp Met Thr Phe Asp Leu Arg 65 70 75 Asn Arg Thr Tyr Val His Thr Cys Cys Asn Tyr Asn Tyr Cys Asn Phe 90 Lys Leu * 98

<210> 1061 <211> 64 <212> PRT <213> Homo sapiens

<210> 1062 <211> 149 <212> PRT <213> Homo sapiens

<400> 1062 Met Tyr Leu Ser Asn Thr Thr Val Thr Ile Leu Ala Asn Leu Val Pro 10 Phe Thr Leu Thr Leu Ile Ser Phe Leu Leu Leu Ile Cys Ser Leu Cys 20 25 Lys His Leu Lys Lys Met Gln Leu His Gly Lys Gly Ser Gln Asp Pro 35 40 Ser Met Lys Val His Ile Lys Ala Leu Gln Thr Val Thr Ser Phe Leu 55 Leu Leu Cys Ala Ile Tyr Phe Leu Ser Met Ile Ile Ser Val Cys Asn 70 Phe Gly Arg Leu Glu Lys Gln Pro Val Phe Met Phe Cys Gln Ala Ile 85 90 Ile Phe Ser Tyr Pro Ser Thr His Pro Phe Ile Leu Ile Leu Gly Asn 100 105 110 Lys Lys Leu Lys Gln Ile Phe Leu Ser Val Leu Arg His Val Arg Tyr 115 120 125 Trp Val Lys Asp Arg Ser Leu Arg Leu His Arg Phe Thr Arg Gly Ala 130 135 Leu Cys Val Phe * 145 148

<210> 1063 <211> 63 <212> PRT <213> Homo sapiens

<210> 1064 <211> 92 <212> PRT <213> Homo sapiens

<210> 1065 <211> 67 <212> PRT <213> Homo sapiens

<210> 1066 <211> 78 <212> PRT <213> Homo sapiens

50 55 60 Leu Ala Gly Trp Asp Leu Thr Gly Ala Pro Gly Ser Leu Gly 65 70 75 78

<210> 1067 <211> 55 <212> PRT <213> Homo sapiens

<210> 1068 <211> 48 <212> PRT <213> Homo sapiens

<210> 1069 <211> 64 <212> PRT <213> Homo sapiens

<210> 1070

<211> 73 <212> PRT <213> Homo sapiens

<210> 1071 <211> 152 <212> PRT <213> Homo sapiens

<400> 1071 Met Phe Trp Thr Met Ile Ile Leu Leu Gln Val Leu Ile Pro Ile Ser Leu Tyr Val Ser Ile Glu Ile Val Lys Leu Gly Gln Ile Tyr Phe Ile 20 25 30 Gln Ser Asp Val Asp Phe Tyr Asn Glu Lys Met Asp Ser Ile Val Gln 35 40 Cys Arg Ala Leu Asn Ile Ala Glu Asp Leu Gly Gln Ile Gln Tyr Leu 55 60 Phe Ser Asp Lys Thr Gly Thr Leu Thr Glu Asn Lys Met Val Phe Arg 70 Arg Trp Ser Gly Gly Arg Phe Asp Tyr Cys Pro Gly Glu Lys Ala Arg 85 90 95 Arg Val Glu Ser Phe Gln Glu Ala Ala Phe Glu Glu His Phe Leu 105 Thr Thr Gly Arg Gly Phe Leu Thr His Met Ala Asn Pro Arg Ala Pro 115 120 125 Pro Leu Ala Asp Thr Phe Lys Met Gly Ala Ser Gly Arg Leu Ser Pro 130 135 Pro Ser Leu Thr Ala Arg Gly Ala 145 150 152

<210> 1072 <211> 113 <212> PRT <213> Homo sapiens

 $<\!\!400\!\!> 1072$ Met Thr Ala Gly Val Leu Trp Gly Leu Phe Gly Val Leu Gly Phe Thr 1 5 10 15 Gly Val Ala Leu Leu Leu Tyr Ala Leu Phe His Lys Ile Ser Gly Glu

25 20 Ser Ser Ala Thr Asn Glu Pro Arg Gly Ala Ser Arg Pro Asn Pro Gln 40 35 Glu Phe Thr Tyr Ser Ser Pro Thr Pro Asp Met Glu Glu Leu Gln Pro 60 55 Val Tyr Val Asn Val Gly Ser Val Asp Val Asp Val Val Tyr Ser Gln 75 70 Val Trp Ser Met Gln Gln Pro Glu Ser Ser Ala Asn Ile Arg Thr Leu 85 90 Leu Glu Asn Lys Asp Ser Gln Val Ile Tyr Ser Ser Val Lys Lys Ser 105 100

<210> 1073 <211> 52 <212> PRT <213> Homo sapiens

<210> 1074 <211> 78 <212> PRT <213> Homo sapiens

<210> 1075 <211> 253 <212> PRT <213> Homo sapiens

<400> 1075 Met Ser Ser Ser Pro Gly Leu Leu Phe Ser Ser Leu Ser His Leu Leu 10 Leu Asn Ser Ser Thr Leu Ala Leu Leu Thr His Arg Leu Ser Gln Met 25 30 20 Thr Cys Leu Gln Ser Leu Arg Leu Asn Arg Asn Ser Ile Gly Asp Val 35 40 45 Gly Cys Cys His Leu Ser Glu Ala Leu Arg Ala Ala Thr Ser Leu Glu 55 Glu Leu Asp Leu Ser His Asn Gln Ile Gly Asp Ala Gly Asp Gln His 70 75 Leu Ala Thr Ile Leu Pro Gly Leu Pro Glu Leu Arg Lys Ile Asp Leu 85 90 Ser Gly Asn Ser Ile Ser Ser Ala Gly Gly Val Gln Leu Ala Glu Ser 100 105 Leu Val Leu Cys Arg Arg Leu Glu Glu Leu Met Leu Gly Cys Asn Ala 120 125 Leu Gly Asp Pro Thr Ala Leu Gly Leu Ala Gln Glu Leu Pro Gln His 140 130 135 Leu Arg Val Leu His Leu Pro Phe Ser His Leu Gly Pro Asp Gly Ala 150 155 Leu Ser Leu Ala Gln Asp Leu Asp Gly Ser Pro His Leu Glu Glu Ile 170 Ser Leu Ala Glu Asn Asn Leu Ala Gly Gly Val Leu Arg Phe Cys Met 180 185 190 Glu Leu Pro Leu Leu Arg Gln Ile Glu Leu Ser Trp Asn Leu Leu Gly 205 200 195 Asp Glu Ala Ala Glu Leu Ala Gln Val Leu Pro Gln Met Gly Arg 210 215 220 Leu Lys Arg Val Glu Tyr Glu Gly Pro Gly Glu Glu Trp Asp Gly Leu 230 235 Lys Gly Asp Leu His Pro Gly Asn Thr Lys Arg Pro Leu . 250 253 245

<210> 1076 <211> 64 <212> PRT <213> Homo sapiens

<210> 1077 <211> 147 <212> PRT <213> Homo sapiens

<400> 1077 Met Met Lys Ser Leu Arg Val Leu Leu Val Ile Leu Trp Leu Gln Leu 10 Ser Trp Val Trp Ser Gln Gln Lys Glu Val Glu Gln Asn Ser Gly Pro 20 25 Leu Ser Val Pro Glu Gly Ala Ile Ala Ser Leu Asn Cys Thr Tyr Ser 35 40 Asp Arg Gly Ser Gln Ser Phe Phe Trp Tyr Arg Gln Tyr Ser Gly Lys 55 Ser Pro Glu Leu Ile Met Ser Ile Tyr Ser Asn Gly Asp Lys Glu Asp 75 Gly Arg Phe Thr Ala Gln Leu Asn Lys Ala Ser Gln Tyr Val Ser Leu 85 90 Leu Ile Arg Asp Ser Gln Pro Ser Asp Ser Ala Thr Tyr Leu Cys Ala 100 105 Asp Tyr Ser Gly Asn Thr Pro Leu Val Phe Gly Lys Gly Thr Arg Leu 120 125 Ser Val Ile Ala Asn Ile Gln Asn Pro Asp Pro Ala Leu Tyr Gln Leu 135 140 Arg Asp Ser 145 147

<210> 1078 <211> 55 <212> PRT <213> Homo sapiens

<210> 1079 <211> 97 <212> PRT <213> Homo sapiens

Leu Met Lys Asp Pro Arg Phe Trp Ile Ala Ile Ala Ala Tyr Leu Ala 65 70 75 80

Cys Val Leu Phe Ala Val Phe Phe Asn Ile Phe Leu Ser Pro Ala Asn 85 90 95 96

<210> 1080 <211> 134 <212> PRT <213> Homo sapiens

<400> 1080 Met Leu Ser Ile Leu Leu Ala Thr Leu Thr Leu Ser Leu Lys Glu Lys 10 15 1 5 Arg Gly Glu Arg Ser Ile His Gln Pro Glu Pro Ser Glu Lys Ser Val 20 25 30 Cys Leu Pro Val Ser Gly Ala Asp Pro Phe Arg Gly Ser Arg Gly Arg 40 Gly Lys Glu Ile Arg Arg Glu Lys Asp Ile Gly Leu Leu Glu His Val 55 60 Gly Gln Glu Val Pro Arg Arg Ile Cys Glu Gln Leu Pro Asp Ser Lys 70 75 Ala Leu Ala Arg Pro Gln Asp Gly Pro Cys Leu Leu Asp Ile Arg Lys 85 90 95 Pro Lys Gly Gln Asn Lys Asn Thr Cys Leu Val Gly Glu Gly Ser Leu 100 105 110 Arg Gly His Gln Val Gly Gln Ile Pro Leu Val Thr His Leu Trp Arg 115 120 Leu Pro Gln Lys Cys * 130 133

<210> 1081 <211> 185 <212> PRT <213> Homo sapiens

<400> 1081 Met Lys Ile Leu Val Ala Phe Leu Val Val Leu Thr Ile Phe Gly Ile 10 75 Gln Ser His Gly Tyr Glu Val Phe Asn Ile Ile Ser Pro Ser Asn Asn 20 . 25 Gly Gly Asn Val Gln Glu Thr Val Thr Ile Asp Asn Glu Lys Asn Thr 35 40 Ala Ile Ile Asn Ile His Ala Gly Ser Cys Ser Ser Thr Thr Ile Phe 55 Asp Tyr Lys His Gly Tyr Ile Ala Ser Arg Val Leu Ser Arg Arg Ala 75 Cys Phe Ile Leu Lys Met Asp His Gln Asn Ile Pro Pro Leu Asn Asn 85 90 95 Leu Gln Trp Tyr Ile Tyr Glu Lys Gln Ala Leu Asp Asn Met Phe Ser 100 105 110 Ser Lys Tyr Thr Trp Val Lys Tyr Asn Pro Leu Glu Ser Leu Ile Lys

<210> 1082 <211> 285 <212> PRT <213> Homo sapiens

<221> misc_feature <222> (1)...(285)

<223> Xaa = any amino acid or nothing

<400> 1082 Met Val Ile Ala Leu Ile Ile Phe Leu Arg Ser Pro Ala Met Ala Gly 10 5 Gly Leu Phe Ala Ile Glu Arg Glu Phe Phe Phe Glu Leu Gly Leu Tyr 25 20 Asp Pro Gly Leu Gln Ile Trp Gly Gly Glu Asn Phe Glu Ile Ser Tyr 45 40 Lys Ile Trp Gln Cys Gly Gly Lys Leu Leu Phe Xaa Pro Cys Ser Arg 55 6.0 Val Gly His Ile Tyr Arg Leu Glu Gly Trp Gln Gly Asn Pro Pro Pro 75 Ile Tyr Val Gly Ser Ser Pro Thr Leu Lys Asn Tyr Val Arg Val Val 85 90 Glu Val Trp Trp Asp Glu Tyr Lys Asp Tyr Phe Tyr Ala Ser Arg Pro 105 110 100 Glu Ser Gln Ala Leu Pro Tyr Gly Asp Ile Ser Glu Leu Lys Lys Phe 115 120 125 120 Arg Glu Asp His Asn Cys Lys Ser Phe Lys Trp Phe Met Glu Glu Ile 140 135 Ala Tyr Asp Ile Thr Ser His Tyr Pro Leu Pro Pro Lys Asn Val Asp 150 155 Trp Gly Glu Ile Arg Gly Phe Glu Thr Ala Tyr Cys Ile Asp Ser Met 175 170 165 Gly Lys Thr Asn Gly Gly Phe Val Glu Leu Gly Pro Cys His Arg Met 185 180 Gly Gly Asn Gln Leu Phe Arg Ile Asn Glu Ala Asn Gln Leu Met Gln 200 205 Tyr Asp Gln Cys Leu Thr Lys Gly Ala Asp Gly Ser Lys Val Met Ile 215 220 Thr His Cys Asn Leu Asn Glu Phe Lys Glu Trp Gln Tyr Phe Lys Asn 225 230 235 Leu His Arg Phe Thr His Ile Pro Ser Gly Lys Cys Leu Asp Arg Ser 245 250 Glu Val Leu His Gln Val Phe Ile Ser Asn Cys Asp Ser Ser Lys Thr 260 265 Thr Gln Lys Trp Glu Met Asn Asn Ile His Ser Val * 280

<210> 1083 <211> 73 <212> PRT <213> Homo sapiens

<400> 1083

<210> 1084 <211> 56 <212> PRT <213> Homo sapiens

Leu Glu Lys Arg Tyr Ser Met *

<210> 1085 <211> 68 <212> PRT <213> Homo sapiens

<400> 1085

<210> 1086 <211> 62 <212> PRT <213> Homo sapiens

<210> 1087 <211> 294 <212> PRT <213> Homo sapiens

<400> 1087 Met Pro Tyr Val Thr Glu Ala Thr Arg Val Gln Leu Val Leu Pro Leu 1 5 10 Leu Val Ala Glu Ala Ala Ala Pro Ala Phe Leu Glu Ala Phe Ala 20 25 Ala Asn Val Leu Glu Pro Arg Glu His Ala Leu Leu Thr Leu Leu Leu Val Tyr Gly Pro Arg Glu Gly Gly Arg Gly Ala Pro Asp Pro Phe Leu 55 60 Gly Val Lys Ala Ala Ala Glu Leu Glu Arg Arg Tyr Pro Gly Thr 75 70 Arg Leu Ala Trp Leu Ala Val Arg Ala Glu Ala Pro Ser Gln Val Arg 85 90 Leu Met Asp Val Val Ser Lys Lys His Pro Val Asp Thr Leu Phe Phe 105 Leu Thr Thr Val Trp Thr Arg Pro Gly Pro Glu Val Leu Asn Arg Cys 120 125 Arg Met Asn Ala Ile Ser Gly Trp Gln Ala Phe Phe Pro Val His Phe 130 135 140 Gln Glu Phe Asn Pro Ala Leu Ser Pro Gln Arg Ser Pro Pro Gly Pro 150 155 160 Pro Gly Ala Gly Pro Asp Pro Pro Ser Pro Pro Gly Ala Asp Pro Ser 165 170 Arg Gly Ala Pro Ile Gly Gly Arg Phe Asp Arg Gln Ala Ser Ala Glu 185 Gly Cys Phe Tyr Asn Ala Asp Tyr Leu Ala Ala Arg Ala Arg Leu Ala 195 200 205 Gly Glu Leu Ala Gly Gln Glu Glu Glu Ala Leu Glu Gly Leu Glu 215 220 Val Met Asp Val Phe Leu Arg Phe Ser Gly Leu His Leu Phe Arg Ala 230 235 240 Val Glu Pro Gly Leu Val Gln Lys Phe Ser Leu Arg Asp Cys Ser Pro 245 250

<210> 1088 <211> 477 <212> PRT <213> Homo sapiens

<400> 1088 Met Gln Trp Lys Val Thr Leu Thr Ser Arg Trp Gly Leu Leu Arg His 10 Cys Gln Val Leu Ala Gly Leu Leu His Leu Gly Asn Ile Gln Phe Ala 20 25 Ala Ser Glu Asp Glu Ala Gln Pro Cys Gln Pro Met Asp Asp Ala Lys 35 40 Tyr Ser Val Arg Thr Ala Ala Ser Leu Leu Gly Leu Pro Glu Asp Val 55 б0 Leu Leu Glu Met Val Gln Ile Lys Thr Ile Arg Ala Gly Arg Gln Gln Gln Val Phe Arg Lys Pro Cys Ala Arg Ala Glu Cys Asp Thr Arg Arg 85 90 Asp Cys Leu Ala Lys Leu Ile Tyr Ala Arg Leu Phe Asp Trp Leu Val 105 110 Ser Val Ile Asn Ser Ser Ile Cys Ala Asp Thr Asp Ser Trp Thr Thr 115 120 125 Phe Ile Gly Leu Leu Asp Val Tyr Gly Phe Glu Ser Phe Pro Asp Asn 135 140 Ser Leu Glu Gln Leu Cys Ile Asn Tyr Ala Asn Glu Lys Leu Gln Gln 150 155 His Phe Val Ala His Tyr Leu Arg Ala Gln Gln Glu Glu Tyr Ala Val 170 Glu Gly Leu Glu Trp Ser Phe Ile Asn Tyr Gln Asp Asn Gln Pro Cys 185 Leu Asp Leu Ile Glu Gly Ser Pro Ile Ser Ile Cys Ser Leu Ile Asn 195 200 205 Glu Glu Cys Arg Leu Asn Arg Pro Ser Ser Ala Ala Gln Leu Gln Thr 210 215 220 Arg Ile Glu Thr Ala Leu Ala Gly Ser Pro Cys Leu Gly His Asn Lys 230 235 Leu Ser Arg Glu Pro Ser Phe Ile Val Val His Tyr Ala Gly Pro Val 250 Arg Tyr His Thr Ala Gly Leu Val Glu Lys Asn Lys Asp Pro Ile Pro 265 260 Pro Glu Leu Thr Arg Leu Leu Gln Gln Ser Gln Asp Pro Leu Leu Met 280 285 275 Gly Leu Phe Pro Thr Asn Pro Lys Glu Lys Thr Gln Glu Glu Pro Pro 295 300 Gly Gln Ser Arg Ala Pro Val Leu Thr Val Val Ser Lys Phe Lys Ala 310 315 Ser Leu Glu Gln Leu Leu Gln Val Leu His Ser Thr Thr Pro His Tyr 325 330 Ile Arg Cys Ile Met Pro Asn Ser Gln Gly Gln Ala Gln Thr Phe Leu

340 345 Gln Glu Glu Val Leu Ser Gln Leu Glu Ala Cys Gly Leu Val Glu Thr 360 365 Ile His Ile Ser Ala Ala Gly Phe Pro Ile Arg Val Ser His Arg Asn 375 380 Phe Val Glu Arg Tyr Lys Leu Leu Arg Arg Leu His Pro Cys Thr Ser 385 390 395 400 Ser Gly Pro Asp Ser Pro Tyr Pro Ala Lys Gly Leu Pro Glu Trp Cys 405 410 Pro His Ser Glu Glu Ala Thr Leu Glu Pro Leu Ile Gln Asp Ile Leu 425 His Thr Leu Pro Val Leu Thr Gln Ala Ala Ala Ile Thr Gly Asp Ser 435 440 445 Ala Glu Ala Met Pro Ala Pro Met His Cys Gly Arg Thr Lys Val Phe 450 455 460 Met Thr Asp Ser Met Leu Glu Leu Leu Glu Cys Gly Ala 470 475

<210> 1089 <211> 66 <212> PRT <213> Homo sapiens

<210> 1090 <211> 185 <212> PRT <213> Homo sapiens

<400> 1090 Met Leu Trp Leu Leu Phe Phe Leu Val Thr Ala Ile His Ala Glu Leu 5 10 Cys Gln Pro Gly Ala Glu Asn Ala Phe Lys Val Arg Leu Ser Ile Arg 20 25 Thr Ala Leu Gly Asp Lys Ala Tyr Ala Trp Asp Thr Asn Glu Glu Tyr 45 35 40 Leu Phe Lys Ala Met Val Ala Phe Ser Met Arg Lys Val Pro Asn Arg 55 . 60 Glu Ala Thr Glu Ile Ser His Val Leu Leu Cys Asn Val Thr Gln Arg 70 75 Val Ser Phe Trp Phe Val Val Thr Asp Pro Ser Lys Asn His Thr Leu 90

Pro Ala Val Glu Val Gln Ser Ala Ile Arg Met Asn Lys Asn Arg Ile 105 100 Asn Asn Ala Phe Phe Leu Asn Asp Gln Thr Leu Glu Phe Leu Lys Ile 120 125 115 Pro Ser Thr Leu Ala Pro Pro Met Asp Pro Ser Val Pro Ile Trp Ile 140 135 Ile Ile Phe Gly Val Ile Phe Cys Ile Ile Ile Val Ala Ile Ala Leu 155 150 Leu Ile Leu Ser Gly Ile Trp Gln Arg Arg Arg Lys Asn Lys Glu Pro 165 170 Ser Glu Val Asp Asp Ala Glu Glu * 184 180

<210> 1091 <211> 47 <212> PRT <213> Homo sapiens

<210> 1092 <211> 46 <212> PRT <213> Homo sapiens

<210> 1093 <211> 64 <212> PRT <213> Homo sapiens

35 40 45
Ser Leu Pro Gly Ala Pro Ala Thr Ser Ala Ser Pro Ser Val Leu *
50 55 60 63

<210> 1094 <211> 85 <212> PRT <213> Homo sapiens

<400> 1094 Met His Phe Leu Ala Thr Phe Ala Leu Phe Phe Ile Phe Gly Val Phe 5 10 Phe Leu Phe Ala Val Leu Thr Asn Leu Leu Leu Ala Glu Glu Val Asn 20 2.5 30 Ile Arg Gly Gly Asn Phe Leu Gly Ser Phe Leu Val His Thr Leu Phe 35 45 40 Leu Asp Gln Val Pro Gly Glu Ile Thr His Asp Ser His Leu Val Leu 50 55 60 Ala Ile Thr Ile Asn Thr Ala Ser Pro Lys Phe Ser Ser Ser Ile Phe Phe Tyr Gln Leu * 84

<210> 1095 <211> 89 <212> PRT <213> Homo sapiens

<400> 1095 Met Ala Ser His Gly Glu Glu Asp Arg His Trp Leu Arg Ala Cys Thr 10 Trp Ile Trp Ala Leu Ser Leu Thr Leu Ser Val Ser Ser Ser Val Gly ⁻ 25 20 3.0 Trp Arg Arg Gly Gly Cys Arg Trp Leu Gly Arg Arg Asn Ala Thr Val 35 40 45 Pro Arg Asn Ser Pro His Gly Thr Ser Cys Leu His Cys Val Leu Asp 55 Ile Pro Ala Lys Cys Gly Arg Lys Arg Ser Gly Glu Gly Thr Phe Gln 70 Ser Leu Leu Phe Cys Thr Ala 88 85

<210> 1096 <211> 158 <212> PRT <213> Homo sapiens

Lys Phe Leu Lys Lys Ala Asp Thr Arg Asp Ser Arg Gln Ala Cys Leu 25 Ala Ala Ser Leu Ala Leu Ala Leu Asn Gly Val Phe Thr Asn Thr Ile 40 Lys Leu Ile Val Gly Arg Pro Arg Pro Asp Phe Phe Tyr Arg Cys Phe 55 60 Pro Asp Gly Leu Ala His Ser Asp Leu Met Cys Thr Gly Asp Lys Asp 70 Val Val Asn Glu Gly Arg Lys Ser Phe Pro Ser Gly His Ser Ser Phe 90 Ala Phe Ala Gly Leu Ala Phe Ala Ser Phe Tyr Leu Ala Gly Lys Leu 100 105 110 His Cys Phe Thr Pro Gln Gly Arg Gly Lys Ser Trp Arg Phe Cys Ala 115 120 Phe Leu Ser Pro Leu Leu Phe Ala Ala Val Ile Ala Leu Ser Arg Thr 135 Cys Asp Tyr Lys His His Trp Gln Gly Pro Phe Lys Trp *

<210> 1097 <211> 88 <212> PRT <213> Homo sapiens

<210> 1098 <211> 58 <212> PRT <213> Homo sapiens

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<210> 1099
<211> 72
<212> PRT
<213> Homo sapiens
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<210> 1100 <211> 47 <212> PRT <213> Homo sapiens

<210> 1101 <211> 130 <212> PRT <213> Homo sapiens

<400> 1101 Met Arg Pro Leu Lys Pro Gly Ala Pro Leu Pro Ala Leu Phe Leu Leu 10 Ala Leu Ala Leu Ser Pro His Gly Ala His Gly Arg Pro Arg Gly Arg 20 25 Arg Gly Ala Arg Val Thr Asp Lys Glu Pro Lys Pro Leu Leu Phe Leu 45 35 40 Pro Ala Ala Gly Ala Gly Arg Thr Pro Ser Gly Ser Arg Ser Ala Glu 55 Ile Phe Pro Arg Asp Ser Asn Leu Lys Asp Lys Phe Ile Lys His Phe 70 Thr Gly Pro Val Thr Phe Ser Pro Glu Cys Ser Lys His Phe His Arg **85** 90 95 Leu Tyr Tyr Asn Thr Arg Glu Cys Ser Thr Pro Ala Tyr Tyr Lys Arg 105

Cys Ala Arg Leu Leu Thr Arg Leu Ala Val Ser Pro Leu Cys Ser Gln
115
120
125
Thr *

<210> 1102 <211> 170 <212> PRT <213> Homo sapiens

<400> 1102 Met Gln Phe Val Leu Leu Arg Thr Leu Ala Tyr Ile Pro Thr Pro Ile 10 1 5 Tyr Phe Gly Ala Val Ile Asp Thr Thr Cys Met Leu Trp Gln Glu 20 25 Cys Gly Val Gln Gly Ser Cys Trp Glu Tyr Asn Val Thr Ser Phe Arg 40 Phe Val Tyr Phe Gly Leu Ala Ala Val Leu Lys Tyr Val Gly Cys Ile 55 Phe Ile Leu Leu Ala Trp Tyr Ser Ile Lys Asp Thr Glu Asp Glu Gln 70 75 Pro Arg Leu Arg Gln Lys Lys Ile Cys Leu Ser Thr Leu Ser Asp Thr 90 85 Met Thr Gln Pro Asp Ser Ala Gly Val Val Ser Cys Pro Leu Phe Thr 100 105 110 Pro Asp Gly Glu Ile His Lys Lys Thr Gly Leu Arg Lys Arg Asp Pro 115 120 125 Gly Gly Thr Thr Glu Pro Thr Pro Gly Pro Leu Arg Lys Arg Pro Leu 135 140 Cys Thr Leu Glu Ala Pro Arg Leu Pro Asn Lys Ala Pro Phe Thr Leu 145 150 155 Glu Leu Ala Leu Leu Arg Val Arg Leu * 169 165

<210> 1103 <211> 62 <212> PRT <213> Homo sapiens

<210> 1104 <211> 83

<212> PRT <213> Homo sapiens

<400> 1104 Met Lys Gln Leu Ser Pro Leu Pro Leu Pro Trp Val Leu Cys Phe Leu 1.0 5 Trp Lys Pro Ser Lys Leu Ser Val Leu Ser Phe Ala Ser Pro Pro Ser 30 25 Thr Lys Pro Ser Gln Gln Ala Gly Leu Val Cys Ser Leu Ile Arg Val 40 Ser Thr Ser Ser Thr Pro Ala Cys Thr Phe Tyr Leu Pro Val Asn Ala 55 60 50 Lys Cys Arg Ser Cys Pro Leu Asn Asn Pro Pro Trp Glu Val Pro Trp 75 Ile Asn * 82

<210> 1105 <211> 124 <212> PRT <213> Homo sapiens

<400> 1105 Met Val Phe Thr Val Thr Leu Lys Leu Ala Leu Asp Thr His Tyr Trp 10 1 5 Thr Trp Ile Asn His Phe Val Ile Trp Gly Ser Leu Leu Phe Tyr Val 20 25 Val Phe Ser Leu Leu Trp Gly Gly Val Ile Trp Pro Phe Leu Asn Tyr 45 40 1 35 Gln Arg Met Tyr Tyr Val Phe Ile Gln Met Leu Ser Ser Gly Pro Ala 60 55 Trp Leu Ala Ile Val Leu Leu Val Thr Ile Ser Leu Leu Pro Asp Val 75 70 Leu Lys Lys Val Leu Cys Arg Gln Leu Trp Pro Thr Ala Thr Glu Arg 85 90 Val Gln Thr Lys Ser Gln Cys Leu Ser Val Glu Gln Ser Thr Ile Phe 105 100 Met Leu Ser Gln Thr Ser Ser Ser Leu Ser Phe *

<210> 1106 <211> 248 <212> PRT <213> Homo sapiens

115

Leu Glu Ser Ser Trp Pro Phe Trp Leu Thr Leu Ala Leu Ala Val Ile 55 Leu Gln Asn Met Ala Ala His Trp Val Phe Leu Glu Thr His Asp Gly His Pro Gln Leu Thr Asn Arg Arg Val Leu Tyr Ala Ala Thr Phe Leu 85 90 Leu Phe Pro Leu Asn Val Leu Val Gly Ala Met Val Ala Thr Trp Arg 100 105 . 110 Val Leu Leu Ser Ala Leu Tyr Asn Ala Ile His Leu Gly Gln Met Asp 115 120 125 Leu Ser Leu Leu Pro Pro Arg Ala Ala Thr Leu Asp Pro Gly Tyr Tyr 130 135 140 Thr Tyr Arg Asn Phe Leu Lys Ile Glu Val Ser Gln Ser His Pro Ala 150 155 Met Thr Ala Phe Cys Ser Leu Leu Gln Ala Gln Ser Leu Leu Pro 170 1.65 Arg Thr Met Ala Ala Pro Gln Asp Ser Leu Arg Pro Gly Glu Glu Asp 180 185 190 Glu Gly Met Gln Leu Leu Gln Thr Lys Asp Ser Met Ala Lys Gly Ala 200 Arg Pro Gly Ala Ser Arg Gly Arg Ala Arg Trp Gly Leu Ala Tyr Thr 210 215 220 Leu Leu His Asn Pro Thr Leu Gln Val Phe Arg Lys Thr Ala Leu Leu 235 225 230 Gly Ala Asn Gly Ala Gln Pro * 245 247

<210> 1107 <211> 121 <212> PRT <213> Homo sapiens

<400> 1107 Met Met Leu Ala Phe Thr Met Trp Asn Pro Trp Ile Ala Met Cys Leu Leu Gly Leu Ser Tyr Ser Leu Leu Ala Cys Ala Leu Trp Pro Met Val 25 20 Ala Phe Val Val Pro Glu His Gln Leu Gly Thr Ala Tyr Gly Phe Met 35 40 Gln Ser Ile Gln Asn Leu Gly Leu Ala Ile Ile Ser Ile Ile Ala Gly 50 55 60 Met Ile Leu Asp Ser Arg Gly Tyr Leu Phe Leu Glu Val Phe Phe Ile 70 75 Ala Cys Val Ser Leu Ser Leu Leu Ser Val Val Leu Leu Tyr Leu Val 85 90 Asn Arg Ala Gln Gly Gly Asn Leu Asn Tyr Ser Ala Arg Gln Arg Glu 100 105 Glu Ile Lys Phe Ser His Thr Glu * 115 120

<210> 1108 <211> 53 <212> PRT <213> Homo sapiens

<210> 1109 <211> 259 <212> PRT <213> Homo sapiens

<400> 1109 Met His Val Val Ile Val Leu Lys Ala Leu Val Ala Val Gln Ile Leu 10 Leu Ser Ile Lys Glu Tyr Thr Leu Glu Arg Asn His Met His Val Ile 20 25 Ser Val Ile Lys Val Leu Val Lys Ala Gln Thr Ser Leu Asn Ile Arg 40 45 Glu Tyr Thr Leu Val Lys Ser Leu Ile Ile Ala Ile Val Val Arg Lys 60 55 Pro Ser Val Arg Val Leu Thr Leu Phe Phe Ile Arg Glu Phe Thr Leu 70 75 Glu Lys Asn Tyr Tyr Leu Cys Thr Gln Cys Ser Lys Ser Phe Ser Gln 85 90 Ile Ser Asp Leu Ile Lys His Gln Arg Ile His Thr Gly Glu Lys Pro 100 105 110 Tyr Lys Cys Ser Glu Cys Arg Lys Ala Phe Ser Gln Cys Ser Ala Leu 120 125 115 Thr Leu His Gln Arg Ile His Thr Gly Lys Lys Pro Asn Pro Cys Asp 135 140 Glu Cys Gly Lys Ser Phe Ser Arg Arg Ser Asp Leu Ile Asn His Gln 155 Lys Ile His Thr Gly Glu Lys Pro Tyr Lys Cys Asp Ala Cys Gly Lys 165 170 175 Ala Phe Ser Thr Cys Thr Asp Leu Ile Glu His Gln Lys Thr His Ala 180 185 190 Glu Glu Lys Pro Tyr Gln Cys Val Gln Cys Ser Arg Ser Cys Ser Gln 195 200 205 Leu Ser Glu Leu Thr Ile His Glu Glu Val His Cys Gly Glu Asp Ser 215 220 Gln Asn Val Met Asn Val Arg Lys Pro Leu Val Cys Thr Pro Thr Leu 230 235 240 Phe Ser Thr Arg Asp Thr Val Pro Glu Lys Asn Leu Met Asn Ala Val 245 250 Asp Tyr *

<210> 1110

<211> 47 <212> PRT <213> Homo sapiens

Val Gln Ala Phe Cys Ser Arg Asp Pro Glu Arg Trp Pro Ala Ile Ser

20
25
30
Pro Hig Ser Leu Ser Glu Ala Phe Tyr Phe Leu Asp Val Cys *

Pro His Ser Leu Ser Gly Ala Phe Tyr Phe Leu Asn Val Cys * 35 40 45 46

<210> 1111 <211> 93 <212> PRT, <213> Homo sapiens

<210> 1112 <211> 71 <212> PRT <213> Homo sapiens

<210> 1113 <211> 47

<212> PRT <213> Homo sapiens

<210> 1114 <211> 55 <212> PRT <213> Homo sapiens

<210> 1115 <211> 83 <212> PRT <213> Homo sapiens

<210> 1116 <211> 145 <212> PRT <213> Homo sapiens

<400> 1116 Met Val Leu Leu Val Val Gly Asn Leu Val Asn Trp Ser Phe Ala Leu 10 5 Phe Gly Leu Ile Tyr Arg Pro Arg Asp Phe Ala Ser Tyr Met Leu Gly 30 25 Ile Phe Ile Cys Asn Leu Leu Leu Tyr Leu Ala Phe Tyr Ile Ile Met 40 Lys Leu Arg Ser Ser Glu Lys Val Leu Pro Val Pro Leu Phe Cys Ile 60 50 55 Val Ala Thr Ala Val Met Trp Ala Ala Ala Leu Tyr Phe Phe Phe Gln 75 70 Asn Leu Ser Ser Trp Glu Gly Thr Pro Ala Glu Ser Arg Glu Lys Asn 90 95 Arg Glu Cys Ile Leu Leu Asp Phe Phe Asp Asp His Asp Ile Trp His 100 105 110 Phe Leu Ser Ala Thr Ala Leu Phe Phe Ser Phe Leu Asp Leu Leu Thr 125 115 120 Leu Asp Asp Asp Leu Asp Val Val Arg Arg Asp Gln Ile Pro Val Phe 130 135 140 144

<210> 1117 <211> 139 <212> PRT <213> Homo sapiens

<400> 1117 Met Gly Asp Phe Ala Gly Val Asp Phe Val Phe Leu Val Val Cys Phe **10** Ala Gln Arg Gln Gly Ala Ala Glu Ala Val Gly Ala Val Leu Ala Val 25 20 Leu Leu Cys Asp Thr Leu Leu Gly Val Thr Arg Leu Glu Gly Val Ile
35
40
45 35 40 His Leu Pro Leu Tyr Phe Gly Leu Ser Gly Ile Glu Val Ile Gln Gln 55 Ala His Asn Arg Gly Ser Ser Arg Phe Gln Leu Leu Ile Arg Trp Arg 70 75 Glu Asp Glu Asp Arg Trp Cys Ser His Ser Ser Phe Asp Val His Leu 90 85 Gly Pro Leu Ala Glu Arg Pro His Val Ser Thr Gln Leu Leu Thr Val 100 105 110 Ile Ser Cys Lys Ile Phe Arg Leu Gln Ala Thr Asp Cys Glu Ser Lys
115 120 125 Phe Cys Pro Arg Ser Ser Ala Ala Glu Pro 135 138

<210> 1118 <211> 194 <212> PRT <213> Homo sapiens

<400> 1118 Met Cys Leu Leu Phe Leu Leu Pro Arg Phe Pro Val Ser Trp Arg Ala 10 15 Gly Val Asp Gly Ala Ala Pro Ser Ser Gln Asp Leu Trp Arg Ile Arg 25 Ser Pro Cys Gly Asp Cys Glu Gly Phe Asp Val His Ile Met Asp Asp 35 40 Met Ile Lys Arg Ala Leu Asp Phe Arg Glu Ser Arg Glu Ala Glu Pro 50 55 60 His Pro Leu Trp Glu Tyr Pro Cys Arg Ser Leu Ser Glu Pro Trp Gln 75 70 Ile Leu Thr Phe Asp Phe Gln Gln Pro Val Pro Leu Gln Pro Leu Cys 85 Ala Glu Gly Thr Val Glu Leu Lys Arg Pro Gly Gln Ser His Ala Ala 100 105 Val Leu Trp Met Glu Tyr His Leu Thr Pro Glu Cys Thr Leu Ser Thr 125 115 120 Gly Leu Leu Glu Pro Ala Asp Pro Glu Gly Gly Cys Cys Trp Asn Pro 130 135 140 His Cys Lys Gln Ala Val Tyr Phe Phe Ser Pro Ala Pro Asp Pro Arg 150 155 Ala Leu Leu Gly Gly Pro Arg Thr Val Ser Tyr Ala Val Glu Phe His 165 ' 170 Pro Asp Thr Gly Asp Ile Ile Met Glu Phe Arg His Ala Asp Thr Pro 185 190 180 Asp * 193

193

<210> 1119 <211> 118 <212> PRT <213> Homo sapiens

<400> 1119 Met Leu Val Leu Leu Pro Arg Ser Lys Ala Met Pro Leu Leu Ser Val 5 10 Asn Val Thr Leu Ala Phe Phe Pro Arg Asn Lys Glu Ile Val Lys Tyr 25 Leu Leu Asn Gln Gly Ala Asp Val Thr Leu Arg Ala Lys Asn Gly Tyr 40 35 Thr Ala Phe Asp Leu Val Met Leu Leu Asn Asp Pro Asp Ile Phe Gly 60 55 Gly Glu Leu Ile Gly Phe Leu Ser Val Val Thr Glu Leu Val Arg Leu 70 75 80 Leu Ala Ser Val Phe Met Gln Val Asn Lys Asp Ile Gly Arg Arg Ser 85 90 His Gln Leu Pro Leu Pro His Ser Lys Val Pro Thr Ala Leu Glu His 105 100 Pro Ser Ala Ala Arg * 115 117

<210> 1120 <211> 842 <212> PRT

<213> Homo sapiens

<400> 1120 Met Leu Trp Gly Ser Gly Lys Cys Lys Ala Leu Thr Lys Phe Lys Phe 10 Val Phe Phe Leu Arg Leu Ser Arg Ala Gln Gly Gly Leu Phe Glu Thr 20 25 Leu Cys Asp Gln Leu Leu Asp Ile Pro Gly Thr Ile Arg Lys Gln Thr 35 40 Phe Met Ala Met Leu Leu Lys Leu Arg Gln Arg Val Leu Phe Leu Leu 55 Asp Gly Tyr Asn Glu Phe Lys Pro Gln Asn Cys Pro Glu Ile Glu Ala 70 Leu Ile Lys Glu Asn His Arg Phe Lys Asn Met Val Ile Val Thr Thr 90 8.5 Thr Thr Glu Cys Leu Arg His Ile Arg Gln Phe Gly Ala Leu Thr Ala 100 105 Glu Val Gly Asp Met Thr Glu Asp Ser Ala Gln Ala Leu Ile Arg Glu Val Leu Ile Lys Glu Leu Ala Glu Gly Leu Leu Ceu Ile Gln Lys 135 140 Ser Arg Cys Leu Arg Asn Leu Met Lys Thr Pro Leu Phe Val Val Ile 150 155 Thr Cys Ala Ile Gln Met Gly Glu Ser Glu Phe His Ser His Thr Gln 165 170 175 Thr Thr Leu Phe His Thr Phe Tyr Asp Leu Leu Ile Gln Lys Asn Lys 185 190 His Lys His Lys Gly Val Ala Ala Ser Asp Phe Ile Arg Ser Leu Asp 200 His Cys Gly Tyr Leu Ala Leu Glu Gly Val Phe Ser His Lys Phe Asp 215 220 Phe Glu Leu Gln Asp Val Ser Ser Val Asn Glu Asp Val Leu Leu Thr 230 235 Thr Gly Leu Leu Cys Lys Tyr Thr Ala Gln Arg Phe Lys Pro Lys Tyr 250 245 Lys Phe Phe His Lys Ser Phe Gln Glu Tyr Thr Ala Gly Arg Arg Leu 260 265 270 Ser Ser Leu Leu Thr Ser His Glu Pro Glu Glu Val Thr Lys Gly Asn 280 Gly Tyr Leu Gln Lys Met Val Ser Ile Ser Asp Ile Thr Ser Thr Tyr 295 300 Ser Ser Leu Leu Arg Tyr Thr Cys Gly Ser Ser Val Glu Ala Thr Arg 310 315 Ala Val Met Lys His Leu Ala Ala Val Tyr Gln His Gly Cys Leu Leu 325 330 Gly Leu Ser Ile Ala Lys Arg Pro Leu Trp Arg Gln Glu Ser Leu Gln 345 Ser Val Lys Asn Thr Thr Glu Gln Glu Ile Leu Lys Ala Ile Asn Ile 360 365 Asn Ser Phe Val Glu Cys Gly Ile His Leu Tyr Gln Glu Ser Thr Ser 375 380 Lys Ser Ala Leu Ser Gln Glu Phe Glu Ala Phe Phe Gln Gly Lys Ser 390 395 Leu Tyr Ile Asn Ser Gly Asn Ile Pro Asp Tyr Leu Phe Asp Phe Phe 405 410 Glu His Leu Pro Asn Cys Ala Ser Ala Leu Asp Phe Ile Lys Leu Gly 420 425 Phe Tyr Gly Gly Ala Met Ala Ser Trp Glu Lys Ala Ala Glu Asp Thr

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440
                                          445
Gly Gly Ile His Met Glu Glu Ala Pro Glu Thr Tyr Ile Pro Ser Arg
           455
                             460
Ala Val Ser Leu Phe Phe Asn Trp Lys Gln Glu Phe Arg Thr Leu Glu
465
          470
                                 475
Val Thr Leu Arg Asp Phe Ser Lys Leu Asn Lys Gln Asp Ile Arg Tyr
                     490
Leu Gly Lys Ile Phe Ser Ser Ala Thr Ser Leu Arg Leu Gln Ile Lys
                 505
Arg Cys Ala Gly Val Ala Gly Ser Leu Ser Leu Val Leu Ser Thr Cys
      515
                       520
Lys Asn Ile Tyr Ser Leu Met Val Glu Ala Ser Pro Leu Thr Ile Glu
                     535
                                      540
Asp Glu Arg His Ile Thr Ser Val Thr Asn Leu Lys Thr Leu Ser Ile
               550
                          555
His Asp Leu Gln Asn Gln Arg Leu Pro Gly Gly Leu Thr Asp Ser Leu
                      570
           565
Gly Asn Leu Lys Asn Leu Thr Lys Leu Ile Met Asp Asn Ile Lys Met
         580
                            585
Asn Glu Glu Asp Ala Ile Lys Leu Ala Glu Gly Leu Lys Asn Leu Lys
      595
                       600
                                       605
Lys Met Cys Leu Phe His Leu Thr His Leu Ser Asp Ile Gly Glu Gly
                    615
                                      620
Met Asp Tyr Ile Val Lys Ser Leu Ser Ser Glu Pro Cys Asp Leu Glu
               630
                         635
Glu Ile Gln Leu Val Ser Cys Cys Leu Ser Ala Asn Ala Val Lys Ile
             645
                   650
Leu Ala Gln Asn Leu His Asn Leu Val Lys Leu Ser Ile Leu Asp Leu
         660 .
                            665
Ser Glu Asn Tyr Leu Glu Lys Asp Gly Asn Glu Ala Leu His Glu Leu
Ile Asp Arg Met Asn Val Leu Glu Gln Leu Thr Ala Leu Met Leu Pro
                    695
                                   700
Trp Gly Cys Asp Val Gln Gly Ser Leu Ser Ser Leu Leu Lys His Leu
                         715
                710
Glu Glu Val Pro Gln Leu Val Lys Leu Gly Leu Lys Asn Trp Arg Leu
             725
                      730
                                       735
Thr Asp Thr Glu Ile Arg Ile Leu Gly Ala Phe Phe Gly Lys Asn Pro 740 745 750
Leu Lys Asn Phe Gln Gln Leu Asn Leu Ala Gly Asn Arg Val Ser Ser
                        760
Asp Gly Trp Leu Ala Phe Met Gly Val Phe Glu Asn Leu Lys Gln Leu
                     775
                                     780
Val Phe Phe Asp Phe Ser Thr Lys Glu Phe Leu Pro Asp Pro Ala Leu
                         795
              790
Val Arg Lys Leu Ser Gln Val Leu Ser Lys Leu Thr Phe Leu Gln Glu
           805
                  810 815
Ala Arg Leu Val Gly Trp Gln Phe Asp Asp Asp Leu Ser Val Ile
         820
                           825
Thr Gly Ala Phe Lys Leu Val Thr Ala *
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<210> 1121 <211> 90 <212> PRT <213> Homo sapiens

<400> 1121 Met Gly Leu Phe Phe Phe Ser Gly Val Gly Ser Phe Val Gly Ser 5 10 Gly Leu Leu Ala Leu Val Ser Ile Lys Ala Ile Gly Trp Met Ser Ser 20 25 30 His Thr Asp Phe Gly Asn Ile Asn Gly Cys Tyr Leu Asn Tyr Tyr Phe 45 40 Phe Leu Leu Ala Ala Ile Gln Gly Ala Thr Leu Leu Leu Phe Leu Ile 55 60 Ile Ser Val Lys Tyr Asp His His Arg Asp His Gln Arg Ser Arg Ala 70 Asn Gly Val Pro Thr Ser Arg Arg Ala * 85

<210> 1122 <211> 129 <212> PRT <213> Homo sapiens

<400> 1122

Met Phe Leu Leu Phe Trp Phe Ile Leu Ser Glu Gly Cys Pro Leu Leu 5 10 Glu Gln Leu Asn Ile Ser Trp Cys Asp Gln Val Thr Lys Asp Gly Ile 20 25 30 Gln Ala Leu Val Arg Gly Cys Gly Gly Leu Lys Ala Leu Phe Leu Lys 3.5 40 Gly Cys Thr Gln Leu Glu Asp Glu Ala Leu Lys Tyr Ile Gly Ala His 55 Cys Pro Glu Leu Val Thr Leu Asn Leu Gln Thr Cys Leu Gln Ile Thr 65 Asp Glu Gly Leu Ile Thr Ile Cys Arg Gly Cys His Lys Leu Gln Ser 85 90 95 Leu Cys Ala Ser Gly Cys Ser Asn Ile Thr Asp Ala Ile Leu Asn Ala 100 105 Leu Ser Gln Asn Cys Pro Arg Leu Ile Ile Leu Glu Val Ala Arg Cys 129

<210> 1123 <211> 243 <212> PRT <213> Homo sapiens

<400> 1123

55 60 Ala Arg Val Leu Val Asp Gly Glu Glu His Val Gly Phe Leu Lys Thr 70 Asp Gly Ser Phe Val Val His Asp Ile Pro Ser Gly Ser Tyr Val Val 85 Glu Val Val Ser Pro Ala Tyr Arg Phe Asp Pro Val Arg Val Asp Ile 105 Thr Ser Lys Gly Lys Met Arg Ala Arg Tyr Val Asn Tyr Ile Lys Thr 120 125 Ser Glu Val Val Arg Leu Pro Tyr Pro Leu Gln Met Lys Ser Ser Gly 135 140 Pro Pro Ser Tyr Phe Ile Lys Arg Glu Ser Trp Gly Trp Thr Asp Phe 150 155 Leu Met Asn Pro Met Val Met Met Val Leu Pro Leu Leu Ile Phe 165 170 175 Val Leu Leu Pro Lys Val Val Asn Thr Ser Asp Pro Asp Met Arg Arg 180 185 190 Glu Met Glu Gln Ser Met Asn Met Leu Asn Ser Asn His Glu Leu Pro 195 200 205 Asp Val Ser Glu Phe Met Thr Arg Leu Phe Ser Ser Lys Ser Ser Gly 210 215 220 Lys Ser Ser Ser Gly Ser Ser Lys Thr Gly Lys Ser Gly Ala Gly Lys 230 235 Arg Arg * 242

<210> 1124 <211> 71 <212> PRT <213> Homo sapiens

<210> 1125 <211> 48 <212> PRT <213> Homo sapiens

Leu Gly Pro Thr Gly Asp Arg Ala Pro Gly Lys Trp Asn Arg Ser * 35 40 45 47

<210> 1126 <211> 159 <212> PRT <213> Homo sapiens

<400> 1126 Met Phe Leu Ile Val Leu Pro Leu Glu Ser Met Ala His Gly Leu Phe 10 1 5 His Glu Leu Gly Asn Cys Leu Gly Gly Thr Ser Val Gly Tyr Ala Ile 25 Val Ile Pro Thr Asn Phe Cys Ser Pro Asp Gly Gln Pro Thr Leu Leu 35 40 Pro Pro Glu His Val Gln Glu Leu Asn Leu Arg Ser Thr Gly Met Leu 50 . 55 Asn Ala Ile Gln Arg Phe Phe Ala Tyr His Met Ile Glu Thr Tyr Gly 70 75 Cys Asp Tyr Ser Thr Ser Gly Leu Ser Phe Asp Thr Leu His Ser Lys . 90 85 Leu Lys Ala Phe Leu Glu Leu Arg Thr Val Asp Gly Pro Arg His Asp 110 105 100 Thr Tyr Ile Leu Tyr Tyr Ser Gly His Thr His Gly Thr Gly Glu Trp 115 120 125 Ala Leu Ala Gly Gly Asp Thr Leu Arg Leu Asp Thr Leu Ile Glu Trp 130 135 140 Trp Arg Glu Lys Asn Gly Ser Phe Cys Ser Pro Pro Tyr Tyr Arg 150

<210> 1127 <211> 76 <212> PRT <213> Homo sapiens

<210> 1128 <211> 140 <212> PRT <213> Homo sapiens

<400> 1128 Met Gly Ala Gly Leu Ala Val Val Pro Leu Met Gly Leu Leu Glu Ser 10 Ile Ala Val Ala Lys Ala Phe Ala Ser Gln Asn Asn Tyr Arg Ile Asp 25 Ala Asn Gln Glu Leu Leu Ala Ile Gly Leu Thr Asn Met Leu Gly Ser 35 40 Leu Val Ser Ser Tyr Pro Val Thr Gly Ser Phe Gly Arg Thr Ala Val 50 55 60 Asn Ala Gln Ser Gly Val Cys Thr Pro Ala Glu Gly Leu Val Thr Glu 70 75 Val Leu Val Leu Leu Ser Leu Asp Tyr Leu Thr Ser Leu Phe Tyr Tyr 85 90 Ile Pro Lys Ser Ala Leu Ala Ala Val Ile Ile Met Ala Val Ala Pro 100 105 110 Leu Phe Asp Thr Lys Ile Phe Arg Thr Leu Trp Arg Val Lys Arg Leu 115 120 Asp Leu Leu Ser Leu Ser Val Thr Phe Leu Leu Cys 135

<210> 1129 <211> 116 <212> PRT <213> Homo sapiens

<400> 1129 Met Ala Glu Ala Phe Pro Phe Phe Ser Pro Phe Leu Gly Trp Leu Gly 1. 5 10 Val Phe Leu Thr Gly Ser Asp Thr Ser Ser Asn Ala Leu Phe Ser Ser 2.0 25 Leu Gln Ala Thr Thr Ala His Gln Ile Gly Val Ser Asp Val Leu Leu 45 35 40 Val Ala Ala Asn Thr Ser Gly Gly Val Thr Gly Lys Met Ile Ser Pro
50 55 60 Gln Ser Ile Ala Val Ala Cys Ala Ala Thr Gly Leu Val Gly Lys Glu 75 70 Ser Asp Leu Phe Arg Phe Thr Leu Lys His Ser Leu Phe Phe Ala Thr 85 90 Ile Val Gly Leu Ile Thr Leu Ala Gln Ala Tyr Trp Phe Thr Gly Met 100 105 Leu Val His * 115

<210> 1130 <211> 81 <212> PRT <213> Homo sapiens

 Cys
 His
 Glu
 Lys
 Cys
 Lys
 Ile
 Phe
 Phe
 Leu
 Lys
 Ser
 Ile
 Ser
 Pro

 Gln
 Ser
 Leu
 Phe
 Leu
 Als
 Ass
 Leu
 Cys
 Ala
 Ser
 Glu
 Pro
 Tyr
 Leu
 Leu
 Leu
 Leu
 Cys
 Ass
 Thr
 Ile
 Ser
 Phe
 Ile
 Ser
 Phe
 Ile
 Ser
 Phe
 Leu
 Ser
 Ala
 Cys
 Ass
 Thr
 Ile
 Ser
 Phe
 Ile
 Phe
 Ile
 Phe
 Ile
 Ile

<210> 1131 <211> 46 <212> PRT <213> Homo sapiens

<210> 1132 <211> 46 <212> PRT <213> Homo sapiens

<210> 1133 <211> 87 <212> PRT <213> Homo sapiens

50 55 60 60 Glu Gln Ala Arg Glu Ser Leu Leu Ser Thr Phe Arg Ile Arg Pro Arg 65 70 75 80 Gly Arg Tyr Val Ser Tyr * 85 86

<210> 1134 <211> 57 <212> PRT <213> Homo sapiens

<400> 1134

<210> 1135 <211> 57 <212> PRT <213> Homo sapiens

<210> 1136 <211> 105 <212> PRT <213> Homo sapiens

<210> 1137 <211> 52 <212> PRT <213> Homo sapiens

<210> 1138 <211> 187 <212> PRT <213> Homo sapiens

<400> 1138 Met Gln Pro Ile Val Ala Lys Ala Leu Val Val Leu Leu Glu Val His 10 Pro Leu Gln Asp Gln Ala Glu Ser Gly Arg Leu Gly His Val His Leu 25 Leu Cys Ala Pro Ala Ala Leu Gln His Ala Leu Arg Gly Ile Thr Leu 35 40 45 His Asn Gly His His Gln Ala Asp His Leu Pro Asp Leu Met His His 55 60 Glu Ala Leu Ala Leu His Pro Asp His Arg Lys Leu Gln Ala Leu Pro 70 75 His Lys Gly Phe Leu Ala Val His Leu Gln Asp Val Ala Ala Gly Thr 85 90 Gly Ile Leu Arg Pro Leu Leu Arg Gly Glu Ile Val Glu Val Val Arg 100 105 110 Ala Leu Val Ala Gly Gln Glu Pro Val Asp Leu Leu Gln Arg Leu Gly 120 125 Ala Gln Ala Val Gly Leu Ile Leu Asn Val Pro Val Leu Val Arg Lys 140 135 Gly Lys Arg Gly Gln Gln Val Ala Ile Gly Pro Gly Ile Thr Ser Val 145 150 155 Leu Gly Val Lys Pro Ala Arg Asp Pro Leu Gln Ser Gln Asn Pro Asn 165 170 Val Arg Gly Lys Val Ala Val Asp Leu Phe 180 185 186

<210> 1139 <211> 109 <212> PRT <213> Homo sapiens

<400> 1139 Met Trp Gln Lys Ser Leu Leu Ile Leu Ser Phe Arg Val Ser Phe Pro 5 10 Leu Phe Leu Thr Tyr Asn Tyr Lys Leu Leu Ser Ile Arg Arg Thr Arg 20 25 Pro Leu Ser Ser Phe Phe Ser Lys Leu Leu Gln Ile Ala Val Asn Ser 35 40 45 Ile Asn Ser Leu Phe Ser Ala Gly Lys Val Ala Phe Ser Lys His Val 55 60 Cys Leu Leu Pro Gly Gly Leu Lys Ser Met Ile Tyr Cys Ser Ser Met 70 75 Cys Leu Lys Gln Leu Leu Arg Ser Phe Lys Gln Glu Ser Ser Lys Gly 85 90 Ser Val Leu Ile Met Val Leu Val Phe Leu Gln Ile 100 105 108

<210> 1140 <211> 83 <212> PRT <213> Homo sapiens

<400> 1140 Met Pro Ala Pro Thr Ala Trp Leu Leu Pro Ala Val Ser Thr Cys Ser 1 10 5 Asn Leu Arg Ala Lys Ala Gly Val Ile Leu Gly Thr Ile Thr Thr Arg 20 25 30 Pro Tyr Val His Thr Trp Gly Ser Ala Asp Met Ala Thr Pro Tyr His 35 40 Leu Gly Pro Phe Trp Thr Leu Gly Thr Asp Lys His Arg Arg Glu Ala 50 55 Asn Arg Gly Gln Arg Ala Ile Trp Gly Trp Pro Thr Gly Pro Pro Trp 75 His Leu * 82

<210> 1141 <211> 58 <212> PRT <213> Homo sapiens

<210> 1142 <211> 46 <212> PRT <213> Homo sapiens

<210> 1143 <211> 58 <212> PRT <213> Homo sapiens

<400> 1143

 Met Leu Trp Ala Leu Ile Arg Ala Ala Leu Ala Gln Leu His Thr Glu

 1
 5
 10
 15

 Glu Pro Lys Lys Arg Lys Glu Glu Lys Met Ser Pro Ala Leu Ser Pro
 30

 Pro Leu Pro Ser Val Pro Ile Ser Leu Gly Gln Asn Asn Arg Lys Arg
 45

 Arg Ser His Leu Ser Leu Leu Leu Gln *
 55
 57

<210> 1144 <211> 147 <212> PRT <213> Homo sapiens

<400> 1144

 Met Ala Tyr Thr Met Ile Pro Val Leu His Phe Phe Cys Cys Glu Thr 1
 5
 10
 15
 15

 Ser Ser Leu Val Arg Thr Lys Val Val Trp Glu Ala Ile Asn Met Val 20
 25
 30

 Phe Ala Lys Ser Met Asn Gly Gly Pro Asp Arg Cys Ile Ala Val Arg 35
 40
 45

 Gln Val Lys Phe Leu Phe Arg Lys Val Ser Phe Ser Glu Lys Ile Asp 50
 55
 60

 His Cys Pro Leu His Asp Gly Asn Ile Leu Leu Pro Gly Pro Trp Glu 65
 70
 75
 80

 Met Ala Pro Tyr Trp Gly Leu Asn Ile Ser Leu Cys His Leu Gln Phe

Arg His Ser Ile Val Ser Leu Ala Arg Cys Ser Leu Gly Glu Gly Gln

Ser Met Leu Trp Cys Pro Cys Leu Thr Ser Ile Ser Val Asp Met Ala

Thr Leu Tyr Ile Asn Ala Ser Ser Ser Leu Ser Ser Lys Gly Lys Lys

Ala Asp *

146

<210> 1145 <211> 103 <212> PRT <213> Homo sapiens

<400> 1145 Met Ala Trp Ile Pro Leu Phe Leu Gly Val Leu Ala Tyr Cys Thr Gly 5 10 Ser Val Ala Ser Tyr Glu Leu Thr Gln Pro Pro Ser Val Ser Val Ser 20 25 3.0 Pro Gly Lys Thr Ala Ser Ile Thr Cys Ser Gly Asp Lys Leu Gly Asp 40 Lys Tyr Ala Ser Trp Tyr Gln Gln Lys Ala Gly Gln Ser Pro Val Leu 50 55 Val Ile Tyr Glu Asp Ser Arg Arg Pro Ser Gly Ile His Lys Arg Phe 65 70 75 Tyr Gly Ser Asn Ser Gly Thr Thr Ala Thr Leu Thr Ile Ser Gly Thr 85 Gln Ala Met Asp Glu Gly *

<210> 1146 <211> 77 <212> PRT <213> Homo sapiens

100 102

<210> 1147 <211> 118 <212> PRT

<213> Homo sapiens

<400> 1147 Met Asn Pro Ser Ala Ser Leu Val Cys Leu Leu Phe Ala Phe Ser Ser 10 Cys Arg Ile Trp Ser Val Leu Cys Gln Leu Cys Val Pro Ser Pro Trp 20 25 Pro Ser Pro Leu Cys Leu Cys Pro Gln Thr Asp Val Ala Pro Ile Cys 35 40 Ala Val Gln Pro Ser Leu Phe Cys Leu Gly Ser Arg Glu Pro Leu Trp 55 60 Thr Val Leu Val Gly Ser Cys Pro Leu Arg Ala Phe Thr Asn Leu Ser 70 75 Val Arg Pro Pro Pro Gly His His Ser Ile His Leu Leu Thr Trp Leu 85 90 Ala Ser Ser Ser Ala Ala Ala Thr Thr Ala Ala Ser Thr Ala Ser Gly 100 Ala Pro His Ser Val * 115 117

<210> 1148 <211> 399 <212> PRT <213> Homo sapiens

<400> 1148

Met Trp Ala Ala Val Gly Gly Phe Leu Phe Ala Pro Arg Cys Phe Leu . 10 Leu Pro Trp Pro Leu Arg Ala Pro Leu Ser Ser Leu Phe Val Leu Pro 20 25 Arg Leu Leu Leu Trp Pro Ile Pro Tyr Pro Val Leu Ala Ser Val Cys 35 Pro Cys Val Pro Gly Gly Arg Phe Phe Gly Pro Leu Tyr Pro Arg Asp 60 Leu Arg Leu Leu Arg Cys Val Pro Gly Glu Leu Thr Gly Ala Ala Pro 70 75 Arg Thr Leu Pro Gly Cys Asp Leu Asn Cys Leu Gly Leu Gly Arg Glu 90 Ala Ala Val Pro Arg Leu Leu Arg Leu Thr Arg Asp Pro Ala Arg Pro 100 105 Ser Cys Arg Thr Leu Gly Val His Ala Val Pro Arg Arg Ala Phe Gly 115 120 Phe Tyr Ala Val Pro Arg Arg Asp Pro Arg Phe Tyr Ala Val Pro Arg 135 140 Arg Val Pro Arg Leu Tyr Ala Val Pro His Pro Ala Leu Arg Val Tyr 150 155 Ala Val Pro Arg Arg Thr Phe Arg Val Tyr Ala Val Pro His Pro Ala 165 170 175 Leu Arg Val Tyr Ala Val Pro Arg Arg Ala Leu Gly Leu Tyr Val Val 180 185 Pro Gln Arg Ala Leu Arg Val Tyr Ala Val Pro Arg Arg Thr Phe Arg 200 205 Val Tyr Ala Val Pro His Pro Ala Leu Arg Leu Tyr Ala Val Ala Arg 215 220 Arg Ala Leu Arg Phe Tyr Val Val Pro Gln Arg Ala Leu Arg Val Tyr

225 230 235 Ala Val Pro Arg Leu Pro Gly Arg Ala Thr Phe Arg Asp Leu Arg Pro 245 250 Leu Leu Arg Leu Leu Pro Leu Gly Gly Arg Arg Val Leu Gly Leu 265 Pro Leu Ser Leu Pro Ala Gly Leu Ala Leu Arg Ala Ala Ser Arg Ala 280 285 Arg Pro Leu His Leu Leu Arg Ala Ala Cys Leu Leu Pro Ser Leu Gly 290 295 300 His Leu Gly Thr Leu Arg Gly Ser Leu Leu Gly Leu Ser Leu Ala Val 310 315 Arg Pro Pro Arg Ala Pro Arg Leu Gly Leu Arg Ala Pro Val Trp Pro 325 330 335 Ala Ala Ser Cys Leu Leu His Ser Gly Gly Ala Pro Arg Arg Leu Leu 345 340 350 Cys Ala Leu Ala Pro Leu Arg Pro Phe Cys Leu Pro Ala Arg Gly Ser 355 360 365 Trp Leu Ser Gly Ser Leu Ser Gln Arg Arg Gly Asp Leu Arg Arg Pro 375 380 Leu Gly Thr Arg Gly Asn Pro Leu Arg Leu Arg Gly Leu Gly His 390 395

<210> 1149 <211> 67 <212> PRT <213> Homo sapiens

<400> 1149 Met Pro Ser Tyr Phe Lys Thr Cys Ser Leu Phe Thr Leu Leu Ser Ser - 5 10 Val Phe Leu Val Cys Ile Trp Ile Phe Lys Thr Asn Ile Lys Ser Ser 20 25 Val Ser Glu Ser Pro Pro Asp Ser Gly Leu Gly Gln Val Thr Ala Val 35 40 45 Tyr Gln Val Gln Cys Leu Cys Trp Ala Lys Asp Cys Asn Tyr Pro Ile 50 55 Cys Ser 65 66

<210> 1150 <211> 70 <212> PRT <213> Homo sapiens

Leu Arg Lys Ala Leu * 65 .69

<210> 1151 <211> 48

<212> PRT <213> Homo sapiens

<400> 1151

<210> 1152 <211> 64 <212> PRT

<213> Homo sapiens

<400> 1152

<210> 1153 <211> 61 <212> PRT <213> Homo sapiens

<400> 1153

Met Thr Ala Arg Phe Leu Leu Ala Arg Pro Ala Tyr Ser Ser Ala Leu Leu Ala Arg Pro Arg Ser Ser Ala Pro Leu Arg Gly Leu Gly Gly Pro Arg Thr Pro Leu Ile Gln Pro Arg Arg Cys Gly Met Met Ser Ile Arg Leu Leu Cys Uru Pro Leu Pro Pro Cys Gln Gln His Ser Leu $\frac{1}{45}$ Cys Ser Val Leu Trp Pro Pro Gln Gln His Ser Leu $\frac{1}{45}$ Cru $\frac{1}{45}$ Cr

<210> 1154 <211> 75

<212> PRT <213> Homo sapiens

<210> 1155 <211> 68 <212> PRT <213> Homo sapiens

<210> 1156 <211> 60 <212> PRT <213> Homo sapiens

<210> 1157
<211> 776
<212> PRT

<213> Homo sapiens

<400> 1157 Met Leu Phe Ile Val Thr Ala Leu Leu Cys Cys Gly Leu Cys Asn Gly Val Leu Ile Glu Glu Thr Glu Ile Val Met Pro Thr Pro Lys Pro Glu Leu Trp Ala Glu Thr Asn Phe Pro Leu Ala Pro Trp Lys Asn Leu Thr Leu Trp Cys Arg Ser Pro Ser Gly Ser Thr Lys Glu Phe Val Leu Leu Lys Asp Gly Thr Gly Trp Ile Ala Thr Arg Pro Ala Ser Glu Gln Val Arg Ala Ala Phe Pro Leu Gly Ala Leu Thr Gln Ser His Thr Gly Ser Tyr His Cys His Ser Trp Glu Glu Met Ala Val Ser Glu Pro Ser Glu Ala Leu Glu Leu Val Gly Thr Asp Ile Leu Pro Lys Pro Val Ile Ser Ala Ser Pro Thr Ile Arg Gly Gln Glu Leu Gln Leu Arg Cys Lys Gly Trp Leu Ala Gly Met Gly Phe Ala Leu Tyr Lys Glu Gly Glu Gln Glu Pro Val Gln Gln Leu Gly Ala Val Gly Arg Glu Ala Phe Phe Thr Ile Gln Arg Met Glu Asp Lys Asp Glu Gly Asn Tyr Ser Cys Arg Thr His Thr Glu Lys Arg Pro Phe Lys Trp Ser Glu Pro Ser Glu Pro Leu Glu Leu Val Ile Lys Glu Met Tyr Pro Lys Pro Phe Phe Lys Thr Trp Ala Ser Pro Val Val Thr Pro Gly Ala Arg Val Thr Phe Asn Cys Ser Thr Pro His Gln His Met Ser Phe Ile Leu Tyr Lys Asp Gly Ser Glu Ile Ala Ser Ser Asp Arg Ser Trp Ala Ser Pro Gly Ala Ser Ala Ala His Phe Leu Ile Ile Ser Val Gly Ile Gly Asp Gly Gly Asn Tyr Ser Cys Arg Tyr Tyr Asp Phe Ser Ile Trp Ser Glu Pro Ser Asp Pro Val Glu Leu Val Val Thr Glu Phe Tyr Pro Lys Pro Thr Leu Leu Ala Gln Pro Gly Pro Val Val Phe Pro Gly Lys Ser Val Ile Leu Arg Cys Gln Gly Thr Phe Gln Gly Met Arg Phe Ala Leu Leu Gln Glu Gly Ala His Val Pro Leu Gln Phe Arg Ser Val Ser Gly Asn Ser Ala Asp Phe Leu Leu His Thr Val Gly Ala Glu Asp Ser Gly Asn Tyr Ser Cys Ile Tyr Tyr Glu Thr Thr Met Ser Asn Arg Gly Ser Tyr Leu Ser Met Pro Leu Met Ile Trp Val Thr Asp Thr Phe Pro Lys Pro Trp Leu Phe Ala Glu Pro Ser Ser Val Val Pro Met Gly Gln Asn Val Thr Leu Trp Cys Arg Gly Pro Val His Gly Val Gly Tyr Ile Leu His Lys Glu Gly Glu Ala Thr

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435
                       440
Ser Met Gln Leu Trp Gly Ser Thr Ser Asn Asp Gly Ala Phe Pro Ile
        455
                             460
Thr Asn Ile Ser Gly Thr Ser Met Gly Arg Tyr Ser Cys Cys Tyr His
                470
                        475
Pro Asp Trp Thr Ser Ser Ile Lys Ile Gln Pro Ser Asn Thr Leu Glu
           485 490
Leu Leu Val Thr Gly Leu Leu Pro Lys Pro Ser Leu Leu Ala Gln Pro
       500
                          505
Gly Pro Met Val Ala Pro Gly Glu Asn Met Thr Leu Gln Cys Gln Gly
      515
                       520
                                      525
Glu Leu Pro Asp Ser Thr Phe Val Leu Leu Lys Glu Gly Ala Gln Glu
                 535
                            540
Pro Leu Glu Gln Gln Arg Pro Ser Gly Tyr Arg Ala Asp Phe Trp Met
          550 555
Pro Ala Val Arg Gly Glu Asp Ser Gly Ile Tyr Ser Cys Val Tyr Tyr
          565 570
Leu Asp Ser Thr Pro Phe Ala Ala Ser Asn His Ser Asp Ser Leu Glu
         580
                         585 590
Ile Trp Val Thr Asp Lys Pro Pro Lys Pro Ser Leu Ser Ala Trp Pro
                      600
                             605
Ser Thr Met Phe Lys Leu Gly Lys Asp Ile Thr Leu Gln Cys Arg Gly
           615
Pro Leu Pro Gly Val Glu Phe Val Leu Glu His Asp Gly Glu Glu Ala
      630
                                635
Pro Gln Gln Phe Ser Glu Asp Gly Asp Phe Val Ile Asn Asn Val Glu
            645
                             650
Gly Lys Gly Ile Gly Asn Tyr Ser Cys Ser Tyr Arg Leu Gln Ala Tyr
                        665
Pro Asp Ile Trp Ser Glu Pro Ser Asp Pro Leu Glu Leu Val Gly Ala
                      680
                                 685
Ala Gly Pro Val Ala Gln Glu Cys Thr Val Gly Asn Ile Val Arg Ser
                   695
                                    700
Ser Leu Ile Val Val Val Val Ala Leu Gly Val Val Leu Ala Ile
705 710 715
Glu Trp Lys Lys Trp Pro Arg Leu Arg Thr Arg Gly Ser Glu Thr Asp
            725
                              730
Gly Arg Asp Gln Thr Ile Ala Leu Glu Glu Cys Asn Gln Glu Gly Glu
                 745
         740
                                  750
Pro Gly Thr Pro Ala Asn Ser Pro Ser Ser Thr Ser Gln Arg Ile Ser
      755
                    760
Val Glu Leu Pro Val Pro Ile *
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<210> 1158 <211> 80 <212> PRT <213> Homo sapiens

Asn Thr Arg Arg Val Glu Phe Trp Asn Gln Met Lys Leu Leu Gly Glu
50 55 60

Ser Val Gly Ile Phe Gly Thr Ala Val Ile Leu Ala Thr Asp Gly *
65 70 75 79

<210> 1159 <211> 132 <212> PRT <213> Homo sapiens

<400> 1159 Met Ser Ser Gly Thr Glu Leu Leu Trp Pro Gly Ala Ala Leu Leu Val 5 10 Leu Leu Gly Val Ala Ala Ser Leu Cys Val Arg Cys Ser Arg Pro Gly 20 25 Ala Lys Arg Ser Glu Lys Ile Tyr Gln Gln Arg Ser Leu Arg Glu Asp 40 45 Gln Gln Ser Phe Thr Gly Ser Arg Thr Tyr Ser Leu Val Gly Gln Ala 55 60 Trp Pro Gly Pro Leu Ala Asp Met Ala Pro Thr Arg Lys Asp Lys Leu 75 70 Leu Gln Phe Tyr Pro Ser Leu Glu Asp Pro Ala Ser Ser Arg Tyr Gln 85 90 Asn Phe Ser Lys Gly Ser Arg His Gly Ser Glu Glu Ala Tyr Ile Asp 105 110 100 Pro Thr Ala Ile Lys Tyr Phe Leu Thr Gln Ala Thr Ala Ser Ile Ile 1.15 120 Leu Leu Ile Ala 130 132

<210> 1160 <211> 167 <212> PRT <213> Homo sapiens

<400> 1160 Met Val Gly Leu Gly Gly Met Ser Gln Leu Leu Leu Ala Ser Leu Leu 10 Pro Pro Val Pro Gln Gly Ser Pro Thr Arg Arg Lys Leu Pro Ala Ser 25 20 Leu Leu Val Ser Thr Ala Leu Ile Ser Pro Val Cys Val Arg Gly Trp 40 45 Met Trp Gln Asn Leu Gln Asn Arg Ile His Gly Ser His Thr Ser Ala 60 55 Arg Arg Val Pro Ser Leu Pro Gly Ala Gly Gln Val Gly Val Arg Trp 70 Glu Ala Gly Pro Ala Cys Arg Thr Gln Pro Ser Pro Gln Asn Leu Ala 90 85 Pro Arg Pro His Pro Ser Ala Ala Gln Leu Ile Glu Asn Ala Ala Leu 105 100 Arg Ser Ala Met Ser Gly Glu Arg Leu Phe Pro Glu Gly Gln Glu His 115 120 125 Leu Gly Pro Leu Val Ala Pro Arg Val Pro Met Gly Gly Ala Leu Cys

<210> 1161 <211> 84 <212> PRT <213> Homo sapiens

<400> 1161 Met Ala Asn Leu Leu Leu Ile Val Pro Ile Leu Ile Ala Met Ala 10 5 Phe Leu Met Leu Thr Glu Arg Lys Ile Leu Gly Tyr Ile Gln Leu Arg 3.0 20 25 Lys Gly Pro Asn Val Val Gly Pro Tyr Gly Leu Leu Gln Pro Phe Ala 45 40 Asp Ala Ile Lys Leu Phe Thr Lys Glu Pro Leu Lys Pro Ala Thr Ser 60 50 55 Ala Ile Thr Leu Tyr Ile Thr Ala Pro Thr Leu Ala Leu Thr Ile Ala 75 Leu Leu Leu * 83

<210> 1162 <211> 80 <212> PRT <213> Homo sapiens

 Met
 Lys
 Ala
 Trp
 Cys
 Phe
 Ser
 Asn
 Lys
 Phe
 Trp
 Leu
 Ala
 Val
 Leu
 Pro

 1
 Cys
 Cys
 Ala
 Ser
 Ala
 Ala
 Tyr
 Leu
 Gly
 Gln
 Val
 Trp
 Leu
 Ile
 Ile
 Ile
 Ile
 Leu
 Ile
 Ile

<210> 1163 <211> 71 <212> PRT <213> Homo sapiens

<400> 1163
Met Tyr Gly Leu Lys Ile Leu Ser His Leu Trp Val Leu Leu Ile Leu
1 5 10 15

 Ser
 Leu
 Leu
 Phe
 Leu
 Arg
 Lys
 Ser
 Phe
 Lys
 Phe
 Tyr
 Ala
 Val
 Ser

 Phe
 Val
 Cys
 Phe
 Ala
 Phe
 Val
 Ala
 Phe
 Trp
 Asn
 Leu
 Gln
 Lys
 Ile

 Ile
 Ala
 Gln
 Ala
 Asn
 Val
 Ile
 Gln
 Ser
 Pro
 Ser
 Ile
 Phe
 Pro
 Cys
 Ser

 Ser
 Ser
 Thr
 Phe
 Lys
 Leu
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<210> 1164 <211> 56 <212> PRT <213> Homo sapiens

<210> 1165
<211> 97
<212> PRT
<213> Homo sapiens
<221> misc_feature
<222> (1) ... (97)
<223> Xaa = any amino acid or nothing

<400> 1165 Met Lys Met Leu Cys Gly Leu Leu Arg Thr Val Gln Gly Val Arg Phe 5 10 Pro Gln Leu Thr Arg Ile His Gly Pro Ser Thr Gln Gly His Gln Leu 30 25 20 Leu Leu Trp Val Gly Val Leu Gln Val Gly Xaa Ser Ser Leu Gly 40 35 Leu Gln Asn Asp Leu Met Gly Pro Ser Leu Gly Arg Gly Pro Pro Pro 60 55 Leu Ala Ala Ser Thr Arg Cys Arg His Val Ala Gln Leu Gly Val Gly 75 70 Leu Ser Lys Thr Trp Gln Pro Ser Thr His Gly Ile Ala Ser Ala Pro 90 •

<210> 1166 <211> 48

<212> PRT <213> Homo sapiens

<210> 1167 <211> 274 <212> PRT <213> Homo sapiens

273

<400> 1167 Met Glu Ala Pro Leu Ser His Leu Glu Ser Arg Tyr Leu Pro Ala His 1 5 10 Phe Ser Pro Leu Val Phe Phe Leu Leu Leu Ser Ile Met Met Ala Cys 20 25 Cys Leu Val Ala Phe Phe Val Leu Gln Arg Gln Pro Arg Cys Trp Glu 40 Ala Ser Val Glu Asp Leu Leu Asn Asp Gln Val Thr Leu His Ser Ile 55 Arg Pro Arg Glu Glu Asn Asp Leu Gly Pro Ala Gly Thr Val Asp Ser 75 Ser Gln Gly Gln Gly Tyr Leu Glu Glu Lys Ala Ala Pro Cys Cys Pro 85 90 Ala His Leu Ala Phe Ile Tyr Thr Leu Val Ala Phe Val Asn Ala Leu 100 105 110 Thr Asn Gly Met Leu Pro Ser Val Gln Thr Tyr Ser Cys Leu Ser Tyr 115 120 125 Gly Pro Val Ala Tyr His Leu Ala Ala Thr Leu Ser Ile Val Ala Asn 135 Pro Leu Ala Ser Leu Val Ser Met Phe Leu Pro Asn Arg Ser Leu Leu 150 155 Phe Leu Gly Val Leu Ser Val Leu Gly Thr Cys Phe Gly Gly Tyr Asn 165 170 175 Met Ala Met Ala Val Met Ser Pro Cys Pro Leu Leu Gln Gly His Trp 180 185 190 Gly Gly Glu Val Leu Ile Val Ser Ile Arg Pro Val Ala Ser Trp Val 195 200 Leu Phe Ser Gly Cys Leu Ser Tyr Val Lys Val Met Leu Gly Val Val 215 220 Leu Arg Asp Leu Ser Arg Ser Ala Leu Leu Trp Cys Gly Ala Ala Val 230 235 Gln Leu Gly Ser Leu Leu Gly Ala Leu Leu Met Phe Pro Leu Val Asn 245 250 Val Leu Arg Leu Phe Ser Ser Ala Asp Phe Cys Asn Leu His Cys Pro 265 260 Ala

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<210> 1168
<211> 230
<212> PRT
<213> Homo sapiens
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<400> 1168 Met Arg Ile Cys Asn Leu Ile Ser Met Met Leu Leu Cys His Trp 10 Asp Gly Cys Leu Gln Phe Leu Val Pro Met Leu Gln Asp Phe Pro Arg 20 Asn Cys Trp Val Ser Ile Asn Gly Met Val Asn His Ser Trp Ser Glu 40 Leu Tyr Ser Phe Ala Leu Phe Lys Ala Met Ser His Met Leu Cys Ile 55 Gly Tyr Gly Arg Gln Ala Pro Glu Ser Met Thr Asp Ile Trp Leu Thr 70 · Met Leu Ser Met Ile Val Gly Ala Thr Cys Tyr Ala Met Phe Ile Gly 85 His Ala Thr Ala Leu Ile Gln Ser Leu Asp Ser Ser Arg Arg Gln Tyr 100 105 110 Gln Glu Lys Tyr Lys Gln Val Glu Gln Tyr Met Ser Phe His Lys Leu 115 120 125 Pro Ala Asp Phe Arg Gln Lys Ile His Asp Tyr Tyr Glu His Arg Tyr 140 135 Gln Gly Lys Met Phe Asp Glu Asp Ser Ile Leu Gly Glu Leu Asn Gly 150 155 Pro Leu Arg Glu Glu Ile Val Asn Phe Asn Cys Arg Lys Leu Val Ala 165 170 Ser Met Pro Leu Phe Ala Asn Ala Asp Pro Asn Phe Val Thr Ala Met 180 185 190 Leu Thr Lys Leu Lys Phe Glu Val Phe Gln Pro Gly Asp Tyr Ile Ile 195 200 205 Pro Arg Arg His His Arg Glu Glu Asp Val Leu His Pro Ala Arg Arg 215 220 Gly Gln Arg Ala His * 225 229

<210> 1169 <211> 213 <212> PRT <213> Homo sapiens

85 90 Val Leu Met Ala Gly Ala Leu Ala Val Leu Ser Glu Gly Leu Gln Gly 100 105 Leu Asp Asp Glu Ala His Val Val Leu Ile Asp Val Glu Pro Gln Gln 115 120 Pro Gln Ala Ala Arg Gly Ala Ala Ala His Asp Val Gln Glu Leu Gln 135 140 Arg Leu Ala Tyr Gln Val Val Gly Phe Val Val Leu Thr Ala Gln 150 155 Glu Val Leu Gln Val Pro Val Val Val Leu Thr Gln Gln Leu Gln Lys 165 170 Ala Gln Asp Gly Leu His Asp Glu His Gly Cys Ala His Leu Thr Ala 180 185 190 Leu His Thr Phe Ala His Leu Val Pro Pro Ala Gln Ala Gly Ala Gln 195 200 Arg Val Ala Gly * 210 212

<210> 1170 <211> 51 <212> PRT <213> Homo sapiens

<210> 1171 <211> 157 <212> PRT <213> Homo sapiens

<400> 1171 Met Leu Val Pro Leu Asn Leu Cys Leu Gln Ser Thr Leu Ala Leu Val 1 5 10 Ser Leu Pro Leu Pro Gly Ile Gly Arg Ala Phe Cys Glu Trp Leu Ser 25 Gly Thr Phe Lys Ala Arg Arg Gln Gly Pro Lys Ala Lys Arg Glu Leu 35 40 45 Trp Asp Val Pro Ser Pro Val Arg Gly Trp Pro Trp Gly Phe Arg Leu 50 55 60 Arg Gly Val Pro Gly Pro Val Ser Pro Ala Phe Gly Pro Phe Gly Glu 70 75 Phe Gly Glu Glu Val Pro Thr Ala Arg Pro Gly Asp Val Arg Gly Ala 85 90 Ala Leu Thr Phe Ile Val Gly Val Ser Ser Glu Val Ser Val Gln Arg 100

<210> 1172 <211> 69 <212> PRT <213> Homo sapiens

<210> 1173 <211> 75 <212> PRT <213> Homo sapiens

<210> 1174 <211> 77 <212> PRT <213> Homo sapiens

 $<\!400\!>$ 1174 Met Leu Ser Ser Phe Phe Lys Ser Cys Phe Cys Val Ser Phe Trp Thr 1 5 10 15 Leu Ser Ile Ala Thr Ser Ser Asn Leu Leu Ile Phe Ser Ser Ala Ile

Ser Asn Leu Leu Leu Ile Leu Ser Ser Val Phe Ser Ile Leu Asp Ile
35
Val Val Phe Ile Thr Arg Ser Met Ile Trp Phe Cys Phe His Pro Cys
50
Ile Tyr Ile Thr Cys Pro Val Phe His Ser Ala Ser *
65

<210> 1175 <211> 59 <212> PRT <213> Homo sapiens

<400> 1175

<210> 1176 <211> 55 <212> PRT <213> Homo sapiens

Val Tyr Arg Asn Ile Ile *
50 54

<210> 1177 <211> 86 <212> PRT <213> Homo sapiens

 Ser Trp Val Arg
 Thr Ala Trp Met Leu Gly Ser Thr Ser Arg Thr Arg

 50
 55
 60

 Gly Leu Ser Arg
 Leu Trp Leu Thr Val Thr Ala Val Met Pro Pro Met
 70

 Fro Leu Ala Pro Pro *
 *

<210> 1178

 <211> 189
 <212> PRT
 <213> Homo sapiens

<400> 1178 Met Met Pro Leu Leu Ser Leu Ile Phe Ser Ala Leu Phe Ile Leu Phe 1 5 Gly Thr Val Ile Val Gln Ala Phe Ser Asp Ser Asn Asp Glu Arg Glu 25 20 Ser Ser Pro Pro Glu Lys Glu Glu Ala Gln Glu Lys Thr Gly Lys Thr 45 40 Glu Pro Ser Phe Thr Lys Glu Asn Ser Ser Lys Ile Pro Lys Lys Gly 60 55 Phe Val Glu Val Thr Glu Leu Thr Asp Val Thr Tyr Thr Ser Asn Leu 70 75 Val Arg Leu Arg Pro Gly His Met Asn Val Val Leu Ile Leu Ser Asn 90 85 Ser Thr Lys Thr Ser Leu Leu Gln Lys Phe Ala Leu Glu Val Tyr Thr 100 105 110 Phe Thr Gly Ser Ser Cys Leu His Phe Ser Phe Leu Ser Leu Asp Lys 115 120 125 His Arg Glu Trp Leu Glu Tyr Leu Leu Glu Phe Ala Gln Asp Ala Ala 140 135 130 Pro Ile Pro Asn Gln Tyr Asp Lys His Phe Met Glu Arg Asp Tyr Thr 145 . 150 155 160 Gly Tyr Val Leu Ala Leu Asn Gly His Lys Lys Tyr Phe Cys Leu Phe
165 170 175 Lys Pro Gln Lys Thr Val Glu Glu Gly Gly Lys Pro * 185 188 180

<210> 1179 <211> 55 <212> PRT <213> Homo sapiens

<210> 1180 <211> 81 <212> PRT <213> Homo sapiens

<400> 1180

Met Ala Phe Leu Leu Ser Thr Leu Leu Asn His Tyr Leu Ala Cys Lys 5 10 His Ser Ser Glu Leu Trp Leu Gln Ser Ser Leu Asn Asn Leu Gly Lys 20 25 Lys Lys Asp Lys Ala Tyr Ile Phe Thr Val Leu Ala Leu Lys His Ile 40 Pro Gln Met Pro Leu Arg Ile Tyr Phe Val Leu Gly Gln Ser Trp Trp 55 60 Leu Met Pro Val Ile Pro Ala Ile Trp Glu Ala Glu Ala Arg Thr Ala 70 75

<210> 1181 <211> 69 <212> PRT <213> Homo sapiens

<400> 1181

Met Asp Glu Val His Val Leu Gly Leu Ala Leu Leu Thr Val Leu Ile 5 Glu Leu Val Ser Pro Leu Asp Ser Leu Arg Arg His Ser Cys Tyr Ile 20 25 Thr His Thr Phe Ser Cys Asn His Thr Asn Ser His Phe Tyr Ile Leu 35 40 . 45 Ser Ile Ser Cys Thr Asn Trp Gly Leu Lys Val Tyr Lys Ile Phe Leu 50 55 60 Ser Cys Glu Phe

65 68

> <210> 1182 <211> 430 <212> PRT <213> Homo sapiens

<400> 1182 Met Ile Thr Lys Thr Pro Ala Gln Leu Arg Ser Val Ala Thr Ile Leu 5 Lys Thr Leu Cys Leu Ala Ser Pro Thr Val Ala Asn Val Lys Ala Pro

20

Pro Gln Val Ala Val Ala Ala Gly Thr Pro Asn Thr Ser Gly Ser Ile 35 40 His Glu Asn Pro Pro Lys Ala Lys Ala Thr Val Asn Val Lys Gln Ala 50 55

25

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Ala Lys Val Val Lys Ala Ser Ser Pro Ser Tyr Leu Ala Glu Gly Lys
                  70
Ile Arg Cys Leu Ala Gln Pro His Pro Gly Thr Gly Val Pro Arg Ala
              85
                             90
Ala Ala Glu Leu Pro Leu Glu Ala Glu Lys Ile Lys Thr Gly Thr Gln 100 $100$
Lys Gln Ala Lys Thr Asp Met Ala Phe Lys Thr Ser Val Ala Val Glu
                     120
                                        125
Met Ala Gly Ala Pro Ser Trp Thr Lys Val Ala Glu Glu Gly Asp Lys
                                     140
                135
Pro Pro His Gly Pro Arg Cys Pro Asn His Ala Cys Gln Arg Leu Gly
                 150
                                  155
Gly Leu Ser Ala Pro Pro Trp Ala Lys Pro Glu Asp Arg Gln Thr Gln
                         170
            165
Pro Gln Pro His Gly His Val Pro Gly Lys Thr Thr Gln Gly Gly Pro
                                   1.90
                         185
Cys Pro Ala Ala Cys Glu Val Gln Gly Met Leu Val Pro Pro Met Ala
                     200
Pro Thr Gly His Ser Thr Cys Asn Val Glu Ser Trp Gly Asp Asn Gly
                    215
                                      220
Ala Thr Arg Ala Gln Pro Ser Met Pro Gly Gln Ala Val Pro Cys Gln
                230
                                   235
Glu Asp Thr Val Gly Ser Leu Leu Ala Ser Leu Cys Ala Glu Val Ala
                      250
            245
Gly Val Leu Ala Ser Gln Glu Asp Leu Arg Thr Leu Leu Ala Lys Ala
                 265
        260
Leu Ser Gln Gly Glu Val Trp Ala Ala Leu Asn Gln Ala Leu Ser Lys
                        280
                                 285
Glu Val Leu Gly Ala Thr Val Thr Lys Ala Leu Pro Gln Ser Met Leu
                   295
                                     300
Ser Met Ala Leu Val Lys Ala Leu Ser Trp Ser Glu Leu Arg Leu Thr
                                   315
                310
Leu Ser Arg Ala Leu Ser Arg Gly Glu Leu Arg Ala Glu Leu Thr Lys
             325
                               330
Val Met Gln Gly Lys Leu Ala Glu Val Leu Ser Lys Ala Leu Thr Glu
    340 345 350
Glu Glu Trp Val Ala Leu Ser Gln Ala Leu Cys Gln Gly Glu Leu Gly
      355
              360
                             365
Ala Leu Leu Ser Gln Ser Trp Cys Arg Val Ala Leu Arg Thr Gly Thr
                    375
Ile Leu Pro Lys Ala Ala Ser Lys Ser Thr Gly Ser Gly Val Thr Lys
                 390
                                  395
Thr Pro Ala Leu Val Lys Val Ala Cys Arg Arg Ser Pro Ser Ala Ala
            405 410 415
Trp Gly Pro Ser Leu Gly Pro Val Arg Pro Gln Thr Ser Lys
                            425
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<210> 1183 <211> 53 <212> PRT <213> Homo sapiens

20 25 30

Ser Thr Ser Pro Pro Gly Ser Met Phe Phe Ser Ser Pro Pro Ser Arg

35 40 45

Gly Ile Pro Ala *

50 52

<210> 1184 <211> 56 <212> PRT <213> Homo sapiens

<210> 1185 <211> 294 <212> PRT <213> Homo sapiens

<400> 1185 Met Pro Tyr Val Thr Glu Ala Thr Arg Val Gln Leu Val Leu Pro Leu 10 5 Leu Val Ala Glu Ala Ala Ala Pro Ala Phe Leu Glu Ala Phe Ala 25 20 Ala Asn Val Leu Glu Pro Arg Glu His Ala Leu Leu Thr Leu Leu Leu 40 Val Tyr Gly Pro Arg Glu Gly Gly Arg Gly Ala Pro Asp Pro Phe Leu 55 60 50 Gly Val Lys Ala Ala Ala Ala Glu Leu Glu Arg Arg Tyr Pro Gly Thr 75 65 · 70 Arg Leu Ala Trp Leu Ala Val Arg Ala Glu Ala Pro Ser Gln Val Arg 90 85 Leu Met Asp Val Val Ser Lys Lys His Pro Val Asp Thr Leu Phe Phe 100 105 Leu Thr Thr Val Trp Thr Arg Pro Gly Pro Glu Val Leu Asn Arg Cys 120 Arg Met Asn Ala Ile Ser Gly Trp Gln Ala Phe Phe Pro Val His Phe 135 140 Gln Glu Phe Asn Pro Ala Leu Ser Pro Gln Arg Ser Pro Pro Gly Pro 150 155 Pro Gly Ala Gly Pro Asp Pro Pro Ser Pro Pro Gly Ala Asp Pro Ser 170 165 Arg Gly Ala Pro Ile Gly Gly Arg Phe Asp Arg Gln Ala Ser Ala Glu 185 190 Gly Cys Phe Tyr Asn Ala Asp Tyr Leu Ala Ala Arg Ala Arg Leu Ala 205 200

<210> 1186 <211> 57 <212> PRT <213> Homo sapiens

<210> 1187 <211> 191 <212> PRT <213> Homo sapiens

<400> 1187 Met.Asp Leu Asp Asn Ala Lys Tyr Ser Leu Leu Gly Phe Ala Leu Phe 5 10 Trp Val Val Val Gly Phe Phe Val Cys Leu Phe Trp Phe Leu Val 25 20 Phe Leu Pro Trp Cys Lys Thr Val Glu Ser Cys Leu Phe Thr Gly Leu 40 Gly Ser Ile Glu Val Cys Val Ser Ser Val Arg Phe Leu Leu Arg Thr 55 60 Ile Cys Ile Phe Asn Asn Ser Thr Ser Ser Arg Pro Ser Arg Arg Asn 75 70 Glu Arg Gly Leu Val Ser Ser Pro Glu Leu Ala Leu Glu Cys Val His
85 90 95 Leu Ala Ala His Gly Leu Val Ala Leu Arg Gly Leu Ile Gln Leu Pro 105 Leu Gln Leu Pro Ala Val Gly Val Asp Ala Leu Gly Leu Leu Cys 120 Leu Leu Gln Leu Pro Leu Glu Leu Leu Asp Pro Gly Ile Ala Phe Leu 135 140 Cys Leu Leu Leu Val Leu Leu Gly His Leu Ala Leu Val Leu His Leu

<210> 1188 <211> 216 <212> PRT <213> Homo sapiens

<400> 1188 5 10 Leu Asn Val Glu Pro Ala Gly Ala Thr Leu Ile Arg Ile Pro Leu Arg 2.0 2.5 30 Gln Val His Pro Gly Arg Arg Thr Leu Asn Leu Leu Arg Gly Trp Gly 35 40 Lys Pro Ala Glu Leu Pro Lys Leu Gly Ala Pro Ser Pro Gly Asp Lys 55 60 Pro Ala Ser Val Pro Leu Ser Lys Phe Leu Asp Ala Gln Tyr Phe Gly 70 75 Glu Ile Gly Leu Gly Thr Pro Pro Gln Asn Phe Thr Val Ala Phe Asp 90 85 Thr Gly Ser Ser Asn Leu Trp Val Pro Ser Arg Arg Cys His Phe Phe 100 105 110 Ser Val Pro Cys Trp Phe His His Arg Phe Asn Pro Asn Ala Ser Ser 120 125 Ser Phe Lys Pro Ser Gly Thr Lys Phe Ala Ile Gln Tyr Gly Thr Gly 135 140 Arg Val Asp Gly Ile Leu Ser Glu Asp Lys Leu Thr Ile Gly Gly Ile 150 155 Lys Gly Ala Ser Val Ile Phe Gly Glu Ala Leu Trp Gly Ile Gln Pro 165 170 175 Gly Ser Ser Leu Phe Pro Ala Pro Met Gly Tyr Trp Gly Leu Gly Phe 190 180 185 Pro Ile Leu Val Leu Trp Glu Gly Ile Ser Ala Pro Ala Gly Cys Thr 195 200 Gly Gly Ala Gly Ala Ile Gly 210 215

<210> 1189 <211> 176 <212> PRT <213> Homo sapiens

 Ala
 Leu
 Ala
 Ala
 Val
 Pro
 Ser
 Met
 Thr
 Glu
 Leu
 Gly
 Asp
 Pro

 Gln
 Ala
 Gly
 Ile
 Arg
 Arg
 Asn
 Val
 Ala
 Ser
 Ala
 Leu
 Gly
 Asn
 Leu
 Gly
 Asn
 Leu
 Gly
 Fro
 Ile
 Asn
 Arg
 Asn
 Val
 Ala
 Ser
 Leu
 Gly
 Gly
 Gly
 Arg
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 Asn
 Val
 Asn
 Fro
 Bro
 Fro
 Bro
 Fro
 Bro
 Bro
 Fro
 Bro
 Bro

<210> 1190 <211> 58 <212> PRT <213> Homo sapiens

20 25 30
Arg Glu Glu Leu Leu Pro Pro Arg Phe Leu Ala Thr Gly Pro Pro Ser
35 40 45

Cys His Pro Pro Ser Gln Thr Val Pro * 55 57

<210> 1191 <211> 88 <212> PRT <213> Homo sapiens

<210> 1192 <211> 136 <212> PRT <213> Homo sapiens

<400> 1192 Met Val Cys Leu Arg Leu Pro Gly Gly Ser Cys Met Ala Val Leu Thr 10 Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr 20 25 Arg Pro Arg Phe Leu Glu Tyr Ser Thr Ser Glu Cys His Phe Phe Asn 40 Gly Thr Glu Arg Val Arg Tyr Leu Asp Arg Tyr Phe His Asn Gln Glu 55 60 Glu Asn Val Arg Phe Asp Ser Asp Val Gly Glu Phe Arg Ala Val Thr
65 70 75 80 Glu Leu Gly Arg Pro Asp Ala Glu Tyr Trp Asn Ser Gln Lys Asp Leu 90 Leu Gly Thr Ala Arg Arg Thr Ser Trp Ser Arg Ser Gly Ala Gly Trp 105 Thr Thr Thr Ala Asp Thr Thr Gly Leu Trp Arg Ala Ser Gln Cys 120 Ser Gly Glu Ser Ile Leu Arg *

<210> 1193 <211> 99 <212> PRT <213> Homo sapiens

<400> 1193 Met Leu Ala Ser Arg Gln Ala Cys Cys Pro Pro Val Ser Ser Leu Phe 1 10 Leu Pro Leu Ser Pro Thr Leu Ser Gly Phe Phe Thr Val Cys Ser Val 25 Ser His Leu His Val Pro Arg Gly Pro Ala Arg Leu Cys Pro Arg Met 40 Ser His Gly Ser Pro Ser Gly Leu Pro Ala Glu Pro Ser Glu His Gly 55 Cys Leu Leu Val Val Gly Leu Gln Gln Asn Cys Thr Arg Leu Thr Ser 65 70 75 Pro Ile Leu Ser Ser Arg Gly Leu Arg Val Gln Arg Arg Val Asn Leu Ala Asp * 98

<210> 1194 <211> 50 <212> PRT <213> Homo sapiens

<400> 1194

<210> 1195 <211> 58 <212> PRT <213> Homo sapiens

<210> 1196 <211> 132 <212> PRT <213> Homo sapiens

<400> 1196 Met Leu Pro Asn Ser Ser Leu Trp Leu Val Met Arg Ile Leu Ile 1 5 10 15 Phe Cys Val Ile Pro Ala Gly Gly Val Leu Gly Ala Pro Thr Ala Ala 20 25 Gly Leu Arg Pro Thr Gly Asp Val Ala Leu Arg Arg Pro Ala Gly Ser 35 40 Val Glu Pro Ser Gly Ser Arg Gly Leu Arg Ala Ser Val Cys Gln Arg 55 60 Leu Ser Met Phe Leu Ala His Phe Leu Arg Gly His Phe Leu Trp Trp 70 75 Ile Leu Asp Gly Gln Arg Leu Gly Phe Pro Leu Ser Leu Ala Thr Trp 85 90 Asn Arg Arg Lys Lys Ser Leu Gln His Leu Leu His Lys His Val Leu 100 105 110 Pro Val Arg Arg His Ala Gly Pro Cys Arg Gly Pro Gln Thr Thr Ala 115 120 Arg Gly Pro Arg 130 132

<210> 1197 <211> 64

<212> PRT <213> Homo sapiens

<400> 1197
Met Pro Tyr Leu Ile Leu Phe Phe Ala Val Tyr Ile Leu Tyr Lys Ile

1 5 10 15

Leu Val Lys Val His Leu Phe Ile Ala Glu Ile Ala Leu Tyr Asp Phe
20 25 30

Leu Lys Phe Phe Glu Leu Tyr Gly Ile Cys Met Phe Lys Thr Leu Thr

Leu Lys Phe Phe Glu Leu Tyr Gly Ile Cys Met Phe Lys Thr Leu Thr
35 40 45

Cys Leu Val Val Thr Thr Leu Ile Phe Ile Asn Leu Leu Ser Leu * 50 60 63

<210> 1198

<211> 53

<212> PRT

<213> Homo sapiens

<400> 1198

Thr Leu Leu Phe * 50 52

<210> 1199

<211> 50

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1) ... (50)

<223> Xaa = any amino acid or nothing

<400> 1199

 Met
 Leu
 Arg
 Leu
 Gly
 Leu
 Cys
 Ala
 Ala
 Leu
 Leu
 Leu
 Cys
 Arg
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Leu
 Cys
 Arg
 Ala
 Asp
 Cys
 Trp
 Leu
 Ile
 Glu
 Glu
 Asp
 Lys
 Gly

 Tyr
 Val
 Trp
 Leu
 Ala
 Ile
 Cys
 Asn
 Gln
 Asn
 Gln
 Pro
 Ala
 Tyr
 Glu
 Thr

 35
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 45

Xaa Pro

50

<210> 1200

<211> 49

<212> PRT

<213> Homo sapiens

<210> 1201 <211> 46 <212> PRT <213> Homo sapiens

<210> 1202 <211> 332 <212> PRT <213> Homo sapiens

<400> 1202 Met Pro Leu Pro Trp Ser Leu Ala Leu Pro Leu Leu Ser Trp Val 10 Ala Gly Gly Phe Gly Asn Ala Ala Ser Ala Arg His His Gly Leu Leu 20 25 Ala Ser Ala Arg Gln Pro Gly Val Cys His Tyr Gly Thr Lys Leu Ala 35 40 45 Cys Cys Tyr Gly Trp Arg Arg Asn Ser Lys Gly Val Cys Glu Ala Thr 55 60 Cys Glu Pro Gly Cys Lys Phe Gly Glu Cys Val Gly Pro Asn Lys Cys 70 Arg Cys Phe Pro Gly Tyr Thr Gly Lys Thr Cys Ser Gln Asp Val Asn 90 Glu Cys Gly Met Lys Pro Arg Pro Cys Gln His Arg Cys Val Asn Thr 105 His Gly Ser Tyr Lys Cys Phe Cys Leu Ser Gly His Met Leu Met Pro 120 125 Asp Ala Thr Cys Val Asn Ser Arg Thr Cys Ala Met Ile Asn Cys Gln 135 140 Tyr Ser Cys Glu Asp Thr Glu Glu Gly Pro Gln Cys Leu Cys Pro Ser 150 155 Ser Gly Leu Arg Leu Ala Pro Asn Gly Arg Asp Cys Leu Asp Ile Asp

165 170 Glu Cys Ala Ser Gly Lys Val Ile Cys Pro Tyr Asn Arg Arg Cys Val 180 185 Asn Thr Phe Gly Ser Tyr Tyr Cys Lys Cys His Ile Gly Phe Glu Leu 195 200 Gln Tyr Ile Ser Gly Arg Tyr Asp Cys Ile Asp Ile Asn Glu Cys Thr 215 220 Met Asp Ser His Thr Cys Ser His His Ala Asn Cys Phe Asn Thr Gln 230 235 Gly Ser Phe Lys Cys Lys Cys Lys Gln Gly Tyr Lys Gly Asn Gly Leu 245 250 Arg Cys Ser Ala Ile Pro Glu Asn Ser Val Lys Glu Val Leu Arg Ala 260 265 Pro Gly Thr Ile Lys Asp Arg Ile Lys Lys Leu Leu Ala His Lys Asn 275 280 285 Ser Met Lys Lys Lys Ala Lys Ile Lys Asn Val Thr Pro Glu Pro Thr 295 300 Arg Thr Pro Thr Pro Lys Val Asn Leu Gln Pro Phe Asn Tyr Glu Glu 310 315 Ile Val Ser Arg Gly Gly Asn Ser His Gly Gly 325

<210> 1203 <211> 825 <212> PRT <213> Homo sapiens

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Val Lys Leu Glu Pro Pro Met Leu Arg Thr Met Asp Pro Ser Pro Glu Ala Ala Pro Pro Gln Ala Gly Cys Leu Gln Leu Cys Trp Glu Pro Trp Gln Pro Gly Leu His Ile Asn Gln Lys Cys Glu Leu Arg His Lys Pro Gln Arg Gly Glu Ala Ser Trp Ala Leu Val Gly Pro Leu Pro Leu Glu Ala Leu Gln Tyr Glu Leu Cys Gly Leu Leu Pro Ala Thr Ala Tyr Thr Leu Gln Ile Arg Cys Ile Arg Trp Pro Leu Pro Gly His Trp Ser Asp Trp Ser Pro Ser Leu Glu Leu Arg Thr Thr Glu Arg Ala Pro Thr Val Arg Leu Asp Thr Trp Trp Arg Gln Arg Gln Leu Asp Pro Arg Thr Val Gln Leu Phe Trp Lys Pro Val Pro Leu Glu Glu Asp Ser Gly Arg Ile Gln Gly Tyr Val Val Ser Trp Arg Pro Ser Gly Gln Ala Gly Ala Ile Leu Pro Leu Cys Asn Thr Thr Glu Leu Ser Cys Thr Phe His Leu Pro Ser Glu Ala Gln Glu Val Ala Leu Val Ala Tyr Asn Ser Ala Gly Thr Ser Arg Pro Thr Pro Val Val Phe Ser Glu Ser Arg Gly Pro Ala Leu Thr Arg Leu His Ala Met Ala Arg Asp Pro His Ser Leu Trp Val Gly Trp Glu Pro Pro Asn Pro Trp Pro Gln Gly Tyr Val Ile Glu Trp Gly 450 455 Leu Gly Pro Pro Ser Ala Ser Asn Ser Asn Lys Thr Trp Arg Met Glu Gln Asn Gly Arg Ala Thr Gly Phe Leu Leu Lys Glu Asn Ile Arg Pro Phe Gln Leu Tyr Glu Ile Ile Val Thr Pro Leu Tyr Gln Asp Thr Met Gly Pro Ser Gln His Val Tyr Ala Tyr Ser Gln Glu Met Ala Pro Ser His Ala Pro Glu Leu His Leu Lys His Ile Gly Lys Thr Trp Ala Gln Leu Glu Trp Val Pro Glu Pro Pro Glu Leu Gly Lys Ser Pro Leu Thr His Tyr Thr Ile Phe Trp Thr Asn Ala Gln Asn Gln Ser Phe Ser Ala Ile Leu Asn Ala Ser Ser Arg Gly Phe Val Leu His Gly Leu Glu Pro Ala Ser Leu Tyr His Ile His Leu Met Ala Ala Ser Gln Ala Gly Ala Thr Asn Ser Thr Val Leu Thr Leu Met Thr Leu Thr Pro Ala Pro Thr Gly Arg Ile Pro Ser Gly Gln Val Ser Gln Thr Gln Leu Thr Ala Ala Trp Ala Pro Gly Cys Pro Gln Ser Trp Arg Arg Met Pro Ser Ser Cys Pro Ala Leu Ala Arg His Pro Ser Pro Ser Ser Gln Cys Trp Arg Arg Met Lys Arg Ser Arg Cys Pro Gly Ser Pro Ile Thr Ala Gln Arg Pro Val Ala Ser Pro Leu Trp Ser Arg Pro Met Cys Ser Arg Gly Thr Gln

700 690 695 Glu Gln Phe Pro Pro Ser Pro Asn Pro Ser Leu Ala Pro Ala Ile Arg 705 710 715 Ser Phe Met Gly Ser Cys Trp Ala Ala Pro Gln Ala Gln Gly Gln Gly 725 730 Thr Ile Ser Ala Val Thr Pro Leu Ser Pro Ser Trp Arg Ala Ser Pro 740 745 750 Pro Ala Pro Ser Pro Met Arg Thr Ser Gly Ser Arg Pro Ala Pro Trp 755 760 765 Gly Pro Leu Val Thr Pro Ser Pro Lys Ser Gln Glu Asp Asp Cys Val 770 775 780 Phe Gly Pro Leu Leu Asn Phe Pro Pro Ser Cys Arg Gly Ser Gly Ser 790 795 800 Met Gly Trp Arg Arg Trp Gly Ala Ser Arg Ala Ser Leu Gly Phe Pro 805 810 Ser Trp Ala Cys Leu Leu Lys Ala 824 820

<210> 1204 <211> 48 <212> PRT <213> Homo sapiens

<210> 1205 <211> 46 <212> PRT <213> Homo sapiens

<210> 1206 <211> 88 <212> PRT <213> Homo sapiens

<400> 1206

 Met
 Gln
 Trp
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 Asn
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 Ala
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 Ser
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 Phe
 Gln
 Ile
 Glu
 Ala

 Ile
 Leu
 Leu
 Pro
 Gln
 Leu
 Ser
 Pro
 Val
 Ala
 Gly
 Ile
 Thr
 Gly
 Thr
 Cys

 Tyr
 His
 Ala
 Trp
 Leu
 Ile
 Phe
 Val
 Phe
 Leu
 Val
 Glu
 Thr
 Gly
 Phe
 His

 His
 Val
 Gly
 Gln
 Ala
 Gly
 Leu
 Glu
 Leu
 Leu
 Thr
 Ser
 Gly
 Pro
 Pro

 Thr
 Leu
 Ala
 Ser
 Ala
 Gly
 Ile
 Thr
 Ser
 Val
 Ser
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 Ala

 Gln
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 Leu
 Leu
 Tr
 Ser
 Val
 Ser
 His
 His
 Ala

 Gln
 Pro
 <td

<210> 1207 <211> 186 <212> PRT

<213> Homo sapiens

<400> 1207 Met Ile Leu Asn Lys Ala Leu Met Leu Gly Ala Leu Ala Leu Thr Thr 10 Val Met Ser Pro Cys Gly Gly Glu Asp Ile Val Ala Asp His Val Ala 25 Ser Tyr Gly Val Asn Leu Tyr Gln Ser Tyr Gly Pro Ser Gly Gln Tyr 35 40 Ser His Glu Phe Asp Gly Asp Glu Glu Phe Tyr Val Asp Leu Glu Arg 60 50 55 Lys Glu Thr Val Trp Gln Leu Pro Leu Phe Arg Arg Phe Arg Arg Phe 70 75 Asp Pro Gln Phe Ala Leu Thr Asn Ile Ala Val Leu Lys His Asn Leu 85 90 Asn Ile Val Ile Lys Arg Ser Asn Ser Thr Ala Ala Thr Asn Glu Val 105 110 Pro Glu Val Thr Val Phe Ser Lys Ser Pro Val Thr Leu Gly Gln Pro 125 120 Asn Thr Leu Ile Cys Leu Val Asp Asn Ile Phe Pro Pro Val Val Asn 130 135 Ile Thr Trp Leu Ser Asn Gly His Ser Val Thr Glu Gly Val Ser Glu 145 150 155 Thr Arg Pro Ser Ser Pro Lys Ser Asp His Phe Leu Leu Gln Asp Gln 165 170 175 Val Thr Ser Pro Ser Phe Pro Phe Glu * 180

<210> 1208 <211> 46 <212> PRT <213> Homo sapiens

<210> 1209 <211> 199 <212> PRT <213> Homo sapiens

<400> 1209 Met Ala Leu Leu Val Pro Leu Ala Leu Leu Val Ile Gln Ala His Leu 1 5 10 Val Leu Ser Val Gln Leu Glu Arg Val Val Thr Glu Glu Lys Val Ala 2.5 30 Leu Leu Ala Leu Leu Val Leu Pro Val Leu Leu Val Pro Glu Val Leu 35 40 Leu Val Leu Lys Ala His Val Val Thr Lys Val Lys Gln Val Asn Val 55 Glu Leu Leu Ala Ser Lys Asp Ile Glu Asp Ser Leu Val Ile Gln Val 70 Pro Gln Val Leu Gln Ala Leu Leu Val Ser Arg Val Gln Ser Ala Val 85 90 Gln Asp Leu Gln Ala Pro Glu Asp Leu Leu Asp Pro Val Asp Leu Leu 100 105 110 Ala Lys Met Glu Pro Val Asp Ile Gln Val Pro Leu Asp His Gln Gly 115 120 125 Leu Glu Val Thr Glu Val Lys Glu Asp Leu Arg Ala Pro Gln Ala Thr 135 140 Gln Gly Asn Gln Ala Leu Leu Asp Leu Leu Val Pro Leu Val Leu Ala 145 155 150 Val Val Leu Glu Pro Leu Pro Leu Gly Leu Glu Val Lys Lys 165 170 Leu Ala Val Leu Pro Arg Ile Met Glu Met Asn Gln Trp Ile Ser Lys 180 185 Ser Thr Pro Met Arg Leu *

<210> 1210 <211> 59 <212> PRT <213> Homo sapiens

195 198

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<210> 1211
<211> 227
<212> PRT
<213> Homo sapiens

<221> misc_feature
<222> (1)...(227)
<223> Xaa = any amino acid or nothing
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<210> 1212 <211> 62 <212> PRT <213> Homo sapiens

50 55 60 61

<210> 1213 <211> 55 <212> PRT <213> Homo sapiens

<210> 1214 <211> 642 <212> PRT <213> Homo sapiens

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Ser Glu Ala Ala His Gln Gly Val Ile Thr Trp Asn Pro Pro Gln Arg
                            250
Ser Phe His Asn Phe Thr Leu Cys Tyr Ile Lys Glu Thr Glu Lys Asp
                         265
                                          270
        260
Cys Leu Asn Leu Asp Lys Asn Leu Ile Lys Tyr Asp Leu Gln Asn Leu
              280
   275
Lys Pro Tyr Thr Lys Tyr Val Leu Ser Leu His Ala Tyr Ile Ile Ala
         295
                          300
Lys Val Gln Arg Asn Gly Ser Ala Ala Met Cys His Phe Thr Thr Lys
             310 315 320
Ser Ala Pro Pro Ser Gln Val Trp Asn Met Thr Val Ser Met Thr Ser
                                 · 335
                           330
    325
Asp Asn Ser Met His Val Lys Cys Arg Pro Pro Arg Asp Arg Asn Gly
                         345
         340
Pro His Glu Arg Tyr His Leu Glu Val Glu Ala Gly Asn Thr Leu Val
                               365
              360
Arg Asn Glu Ser His Lys Asn Cys Asp Phe Arg Val Lys Asp Leu Gln
        375
                           380
Tyr Ser Thr Asp Tyr Thr Phe Lys Ala Tyr Phe His Asn Gly Asp Tyr
             390
                                 395
Pro Gly Glu Pro Phe Ile Leu His His Ser Thr Ser Tyr Asn Ser Lys
            405 410
Ala Leu Ile Ala Phe Leu Ala Phe Leu Ile Ile Val Thr Ser Ile Ala
                                       430
                         425
Leu Leu Val Val Leu Tyr Lys Ile Tyr Asp Leu His Lys Lys Arg Ser
                      440
                                 445
Cys Asn Leu Asp Glu Gln Gln Glu Leu Val Glu Arg Asp Asp Glu Lys
                             460
                  455
Gln Leu Met Asn Val Glu Pro Ile His Ala Asp Ile Leu Leu Glu Thr
                               475
              470
Tyr Lys Arg Lys Ile Ala Asp Glu Gly Arg Leu Phe Leu Ala Glu Phe
           485 490
Gln Ser Ile Pro Arg Val Phe Ser Lys Phe Pro Ile Lys Glu Ala Arg
               505
         500
Lys Pro Phe Asn Gln Asn Lys Asn Arg Tyr Val Asp Ile Leu Pro Tyr
                     520
Asp Tyr Asn Arg Val Glu Leu Ser Glu Ile Asn Gly Asp Ala Gly Ser
                           540
       535
Asn Tyr Ile Asn Ala Ser Tyr Ile Asp Gly Phe Lys Glu Pro Arg Lys
        550
Tyr Ile Ala Ala Gln Gly Pro Arg Asp Glu Thr Val Asp Asp Phe Trp
            565 570
Arg Met Ile Trp Glu Gln Lys Ala Thr Val Ile Val Met Val Thr Arg
         580
                          585
Cys Glu Glu Gly Asn Arg Asn Lys Cys Ala Glu Tyr Trp Pro Ser Met
      595
                      600
                                       605
Glu Glu Gly Thr Arg Ala Phe Gly Glu Cys Cys Cys Lys Asp Leu Thr
                  615
                                   620
Lys His Lys Arg Cys Pro Arg Leu His His Ser Glu Ile Glu His Cys
              630
Lys
641
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<210> 1215

<211> 85

<212> PRT

<213> Homo sapiens

<210> 1216 <211> 403 <212> PRT <213> Homo sapiens

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Pro Gln Pro Val Met Val Thr Trp Val Arg Val Asp Asp Glu Met Pro 280 Gln His Ala Val Leu Ser Gly Pro Asn Leu Phe Ile Asn Asn Leu Asn 295 300 Lys Thr Asp Asn Gly Thr Tyr Arg Cys Glu Ala Ser Asn Ile Val Gly 310 315 Lys Ala His Ser Asp Tyr Met Leu Tyr Val Tyr Asp Pro Pro Thr Thr 325 330 345 350 340 Thr Ile Leu Thr Ile Ile Thr Asp Ser Arg Ala Gly Glu Glu Gly Ser 355 360 365 Ile Arg Ala Val Asp His Ala Val Ile Gly Gly Val Val Ala Val Val 370 375 380 Val Phe Ala Met Leu Cys Leu Leu Ile Ile Leu Gly Arg Tyr Phe Ala 390 Gln Thr * 402

<210> 1217 <211> 49 <212> PRT <213> Homo sapiens

<210> 1218 <211> 304 <212> PRT <213> Homo sapiens

<400> 1218 Met Ala Arg Arg Ser Arg His Arg Leu Leu Leu Leu Leu Arg Tyr 5 10 15 Leu Val Val Ala Leu Gly Tyr His Lys Ala Tyr Gly Phe Ser Ala Pro 2.0 25 3.0 Lys Asp Gln Gln Val Val Thr Ala Val Glu Tyr Gln Glu Ala Ile Leu 40 Ala Cys Lys Thr Pro Lys Lys Thr Val Ser Ser Arg Leu Glu Trp Lys 60 Lys Leu Gly Arg Ser Val Ser Phe Val Tyr Tyr Gln Gln Thr Leu Gln 70 75 Gly Asp Phe Lys Asn Arg Ala Glu Met Ile Asp Phe Asn Ile Arg Ile 85 90 Lys Asn Val Thr Arg Ser Asp Ala Gly Lys Tyr Arg Cys Glu Val Ser

100 105 Ala Pro Ser Glu Gln Gly Gln Asn Leu Glu Glu Asp Thr Val Thr Leu 120 125 Glu Val Leu Gly Asp Val His Val Leu Ala Pro Ala Val Pro Ser Cys 135 140 Glu Val Pro Ser Ser Ala Leu Ser Gly Thr Val Val Glu Leu Arg Cys 155 Gln Asp Lys Glu Gly Asn Pro Ala Pro Glu Tyr Thr Trp Phe Lys Asp 165 170 Gly Ile Arg Leu Leu Glu Asn Pro Arg Leu Gly Ser Gln Ser Thr Asn 180 185 Ser Ser Tyr Thr Met Asn Thr Lys Thr Gly Thr Leu Gln Phe Asn Thr 195 200 205 Val Ser Lys Leu Asp Thr Gly Glu Tyr Ser Cys Glu Ala Arg Asn Ser 215 220 Val Gly Tyr Arg Arg Cys Pro Gly Lys Arg Met Gln Val Asp Asp Leu 230 235 Asn'Ile Ser Gly Ile Ile Ala Ala Val Val Val Ala Leu Val Ile . 245 250 255 Ser Val Cys Gly Leu Gly Val Cys Tyr Ala Gln Arg Lys Gly Tyr Phe 260 265 Ser Lys Glu Thr Ser Phe Gln Lys Ser Asn Ser Ser Ser Lys Ala Thr 280 Thr Met Ser Glu Asn Asp Phe Lys His Thr Lys Ser Phe Ile Ile *

<210> 1219 <211> 1126 <212> PRT <213> Homo sapiens

<400> 1219 Met Trp Phe Leu Phe Leu Cys Pro Asn Leu Trp Ala Met Pro Val Gln Ile Ile Met Gly Val Ile Leu Leu Tyr Asn Leu Leu Gly Ser Ser Ala 2.0 25 Leu Val Gly Ala Ala Val Ile Val Leu Leu Ala Pro Ile Gln Tyr Phe 35 Ile Ala Thr Lys Leu Ala Glu Ala Gln Lys Ser Thr Leu Asp Tyr Ser 60 Thr Glu Arg Leu Lys Lys Thr Asn Glu Ile Leu Lys Gly Ile Lys Leu 70 75 Leu Lys Leu Tyr Ala Trp Glu His Ile Phe Cys Lys Ser Val Glu Glu 85 90 Thr Arg Met Lys Glu Leu Ser Ser Leu Lys Thr Phe Ala Leu Tyr Thr 100 105 Ser Leu Ser Ile Phe Met Asn Ala Ala Ile Pro Ile Ala Ala Val Leu 115 120 Ala Thr Phe Val Thr His Ala Tyr Ala Ser Gly Asn Asn Leu Lys Pro 135 Ala Glu Ala Phe Ala Ser Leu Ser Leu Phe His Ile Leu Val Thr Pro 145 150 1.55 Leu Phe Leu Leu Ser Thr Val Val Arg Phe Ala Val Lys Ala Ile Ile 170 Ser Val Gln Lys Leu Asn Glu Phe Leu Leu Ser Asp Glu Ile Gly Asp 185

Asp Ser Trp Arg Thr Gly Glu Ser Ser Leu Pro Phe Glu Ser Cys Lys Lys His Thr Gly Val Gln Pro Lys Thr Ile Asn Arg Lys Gln Pro Gly Arg Tyr His Leu Asp Ser Tyr Glu Gln Ser Thr Arg Arg Leu Arg Pro Ala Glu Thr Glu Asp Ile Ala Ile Lys Val Thr Asn Gly Tyr Phe Ser Trp Gly Ser Gly Leu Ala Thr Leu Ser Asn Ile Asp Ile Arg Ile Pro Thr Gly Gln Leu Thr Met Ile Val Gly Gln Val Gly Cys Gly Lys Ser Ser Leu Leu Leu Ala Ile Leu Gly Glu Met Gln Thr Leu Glu Gly Lys Val His Trp Ser Asn Val Asn Glu Ser Glu Pro Ser Phe Glu Ala Thr Arg Ser Arg Asn Arg Tyr Ser Val Ala Tyr Ala Ala Gln Lys Pro Trp Leu Leu Asn Ala Thr Val Glu Glu Asn Ile Thr Phe Gly Ser Pro Phe Asn Lys Gln Arg Tyr Lys Ala Val Thr Asp Ala Cys Ser Leu Gln Pro Asp Ile Asp Leu Leu Pro Phe Gly Asp Gln Thr Glu Ile Gly Glu Arg Gly Ile Asn Leu Ser Gly Gly Gln Arg Gln Arg Ile Cys Val Ala Arg Ala Leu Tyr Gln Asn Thr Asn Ile Val Phe Leu Asp Asp Pro Phe Ser Ala Leu Asp Ile His Leu Ser Asp His Leu Met Gln Glu Gly Ile Leu Lys Phe Leu Gln Asp Asp Lys Arg Thr Leu Val Leu Val Thr His Lys Leu Gln Tyr Leu Thr His Ala Asp Trp Ile Ile Ala Met Lys Asp Gly Ser Val Leu Arg Glu Gly Thr Leu Lys Asp Ile Gln Thr Lys Asp Val Glu Leu Tyr Glu His Trp Lys Thr Leu Met Asn Arg Gln Asp Gln Glu Leu Glu Lys Asp Met Glu Ala Asp Gln Thr Thr Leu Glu Arg Lys Thr Leu Arg Arg Ala Met Tyr Ser Arg Glu Ala Lys Ala Gln Met Glu Asp Glu Asp Glu Glu Glu Glu Glu Glu Asp Glu Asp Asp Asn Met Ser Thr Val Met Arg Leu Arg Thr Lys Met Pro Trp Lys Thr Cys Trp Arg Tyr Leu Thr Ser Gly Gly Phe Phe Leu Leu Ile Leu Met Ile Phe Ser Lys Leu Leu Lys His Ser Val Ile Val Ala Ile Asp Tyr Trp Leu Ala Thr Trp Thr Ser Glu Tyr Ser Ile Asn Asn Thr Gly Lys Ala Asp Gln Thr Tyr Tyr Val Ala Gly Phe Ser Ile Leu Cys Gly Ala Gly Ile Phe Leu Cys Leu Val Thr Ser Leu Thr Val Glu Trp Met Gly Leu Thr Ala Ala Lys Asn Leu His His Asn Leu Leu Asn Lys Ile Ile Leu Gly Pro Ile Arg Phe Phe Asp Thr Thr Pro Leu Gly Leu Ile Leu Asn Arg Phe

Ser Ala Asp Thr Asn Ile Ile Asp Gln His Ile Pro Pro Thr Leu Glu Ser Leu Thr Arg Ser Thr Leu Leu Cys Leu Ser Ala Ile Gly Met Ile Ser Tyr Ala Thr Pro Val Phe Leu Val Ala Leu Leu Pro Leu Gly Val Ala Phe Tyr Phe Ile Gln Lys Tyr Phe Arg Val Ala Ser Lys Asp Leu Gln Glu Leu Asp Asp Ser Thr Gln Leu Pro Leu Leu Cys His Phe Ser Glu Thr Ala Glu Gly Leu Thr Thr Ile Arg Ala Phe Arg His Glu Thr Arg Phe Lys Gln Arg Met Leu Glu Leu Thr Asp Thr Asn Asn Ile Ala Tyr Leu Phe Leu Ser Ala Ala Asn Arg Trp Leu Glu Val Arg Thr Asp Tyr Leu Gly Ala Cys Ile Val Leu Thr Ala Ser Ile Ala Ser Ile Ser Gly Ser Ser Asn Ser Gly Leu Val Gly Leu Gly Leu Leu Tyr Ala Leu Thr Ile Thr Asn Tyr Leu Asn Trp Val Val Arg Asn Leu Ala Asp Leu Glu Val Gln Met Gly Ala Val Lys Lys Val Asn Ser Phe Leu Thr Met Glu Ser Glu Asn Tyr Glu Gly Thr Met Asp Pro Ser Gln Val Pro Glu His Trp Pro Gln Glu Gly Glu Ile Lys Ile His Asp Leu Cys Val Arg Tyr Glu Asn Asn Leu Lys Pro Val Leu Lys His Val Lys Ala Tyr Ile Lys Pro Gly Gln Lys Val Gly Ile Cys Gly Arg Thr Gly Ser Gly Lys Ser Ser Leu Ser Leu Ala Phe Phe Arg Met Val Asp Ile Phe Asp Gly Lys Ile Val Ile Asp Gly Ile Asp Ile Ser Lys Leu Pro Leu His Thr Leu Arg Ser Arg Leu Ser Ile Ile Leu Gln Asp Pro Ile Leu Phe Ser 965 970 Gly Ser Ile Arg Phe Asn Leu Asp Pro Glu Cys Lys Cys Thr Asp Asp 980 . Arg Leu Trp Glu Ala Leu Glu Ile Ala Gln Leu Lys Asn Met Val Lys Ser Leu Pro Gly Gly Leu Asp Ala Val Val Thr Glu Gly Gly Glu Asn Phe Ser Val Gly Gln Arg Gln Leu Phe Cys Leu Ala Arg Ala Phe Val 1030 1035 Arg Lys Ser Ser Ile Leu Ile Met Asp Glu Ala Thr Ala Ser Ile Asp 1045 1050 1055 Met Ala Thr Glu Asn Ile Leu Gln Lys Val Val Met Thr Ala Phe Ala Asp Arg Thr Val Val Thr Met Ala His Arg Val Ser Ser Ile Met Asp Ala Gly Leu Val Leu Val Phe Ser Glu Gly Ile Leu Val Glu Cys Asp Thr Val Pro Asn Leu Phe Ala His Lys Asn Gly Pro Phe Ser Thr Leu Val Met Thr Asn Lys

<210> 1220 <211> 46 <212> PRT <213> Homo sapiens

<210> 1221 <211> 56 <212> PRT <213> Homo sapiens

<210> 1222 <211> 253 <212> PRT <213> Homo sapiens

<400> 1222 Met Gly Cys Ala Ile Ile Ala Gly Phe Leu His Tyr Leu Phe Leu Ala Cys Phe Phe Trp Met Leu Val Glu Ala Val Ile Leu Phe Leu Met Val 20 30 Arg Asn Leu Lys Val Val Asn Tyr Phe Ser Ser Arg Asn Ile Lys Met 45 35 40 Leu His Ile Cys Ala Phe Gly Tyr Gly Leu Pro Met Leu Val Val Val 55 60 Ile Ser Ala Ser Val Gln Pro Gln Gly Tyr Gly Met His Asn Arg Cys 70 Trp Leu Asn Thr Glu Thr Gly Phe Ile Trp Ser Phe Leu Gly Pro Val 85 90 Cys Thr Val Ile Val Ile Asn Ser Leu Leu Leu Thr Trp Thr Leu Trp 100 105 110 Ile Leu Arg Gln Arg Leu Ser Ser Val Asn Ala Glu Val Ser Thr Leu

115 120 Lys Asp Thr Arg Leu Leu Thr Phe Lys Ala Phe Ala Gln Leu Phe Ile 135 140 Leu Gly Cys Ser Trp Val Leu Gly Ile Phe Gln Ile Gly Pro Val Ala 150 155 Gly Val Met Ala Tyr Leu Phe His His His Gln Gln Pro Ala Gly Gly 165 170 Leu His Leu Pro His Pro Leu Ser Ala Gln Arg Pro Gly Thr Arg Arg 180 185 Ile Gln Glu Val Asp His Trp Glu Asp Glu Ala Gln Leu Pro Val Pro 195 200 205 Asp Leu Lys Asp Leu Ala Val Leu His Ala Ile Arg Phe Gln Asp Gly 215 220 Leu Lys Ser Phe Leu Ala Phe Lys Tyr Ala Met Glu Pro Thr Val Gly 230 235 Gly Thr Ser Ser Phe Pro Cys Arg Glu Pro Tyr Pro 250 252

<210> 1223 <211> 858 <212> PRT <213> Homo sapiens

<400> 1223 Met Lys Met Leu Thr Arg Leu Gln Val Leu Thr Leu Ala Leu Phe Ser 5 10 Lys Gly Phe Leu Leu Ser Leu Gly Asp His Asn Phe Leu Arg Arg Glu 20 25 Ile Lys Ile Glu Gly Asp Leu Val Leu Gly Gly Leu Phe Pro Ile Asn 35 40 Glu Lys Gly Thr Gly Thr Glu Glu Cys Gly Arg Ile Asn Glu Asp Arg 5.5 Gly Ile Gln Arg Leu Glu Ala Met Leu Phe Ala Ile Asp Glu Ile Asn 70 75 Lys Asp Asp Tyr Leu Leu Pro Gly Val Lys Leu Gly Val His Ile Leu 85 90 Asp Thr Cys Ser Arg Asp Thr Tyr Ala Leu Glu Gln Ser Leu Glu Phe 100 105 Val Arg Ala Ser Leu Thr Lys Val Asp Glu Ala Glu Tyr Met Cys Pro 120 125 Asp Gly Ser Tyr Ala Ile Gln Glu Asn Ile Pro Leu Leu Ile Ala Gly 135 140 Val Ile Gly Gly Ser Tyr Ser Arg Val Ser Ile Gln Gly Ala Asn Leu 150 155 Leu Arg Leu Phe Gln Ile Pro Gln Ile Arg Tyr Ala Ser Thr Ser Ala 165 170 Lys Leu Ser Asp Lys Ser Arg Tyr Asp Tyr Phe Ala Arg Thr Val Pro 180 185 Pro Asp Phe Tyr Gln Ala Lys Ala Met Ala Glu Ile Leu Arg Phe Phe 195 200 Asn Trp Thr Tyr Val Ser Thr Val Ala Ser Glu Gly Asp Tyr Gly Glu 215 220 Thr Gly Ile Glu Ala Phe Glu Glu Glu Ala Arg Leu Arg Asn Ile Cys 230 235 Ile Ala Thr Ala Glu Lys Val Gly Arg Ser Asn Ile Arg Lys Ser Tyr

255

Asp Ser Val Ile Arg. Glu Leu Leu Gln Lys Pro Asn Ala Arg Val Val Val Leu Phe Met Arg Ser Asp Asp Ser Arg Glu Leu Ile Ala Ala Ala Ser Arg Ala Asn Ala Ser Phe Thr Trp Val Ala Ser Asp Gly Trp Gly Ala Gln Glu Ser Ile Ile Lys Gly Ser Glu His Val Ala Tyr Gly Ala Ile Thr Leu Glu Leu Ala Ser Gln Pro Val Arg Gln Phe Asp Arg Tyr Phe Gln Ser Leu Asn Pro Tyr Asn Asn His Arg Asn Pro Trp Phe Arg Asp Phe Trp Glu Gln Lys Phe Gln Cys Ser Leu Gln Asn Lys Arg Asn His Arg Arg Val Cys Asp Lys His Leu Ala Ile Asp Ser Ser Asn Tyr Glu Gln Glu Ser Lys Ile Met Phe Val Val Asn Ala Val Tyr Ala Met Ala His Ala Leu His Lys Met Gln Arg Thr Leu Cys Pro Asn Thr Thr Lys Leu Cys Asp Ala Met Lys Ile Leu Asp Gly Lys Lys Leu Tyr Lys Asp Tyr Leu Leu Lys Ile Asn Phe Thr Ala Pro Phe Asn Pro Asn Lys Asp Ala Asp Ser Ile Val Lys Phe Asp Thr Phe Gly Asp Gly Met Gly Arg Tyr Asn Val Phe Asn Phe Gln Asn Val Gly Gly Lys Tyr Ser Tyr Leu Lys Val Gly His Trp Ala Glu Thr Leu Ser Leu Asp Val Asn Ser Ile His Trp Ser Arg Asn Ser Val Pro Thr Ser Gln Cys Ser Asp Pro Cys Ala Pro Asn Glu Met Lys Asn Met Gln Pro Gly Asp Val Cys Cys Trp Ile Cys Ile Pro Cys Glu Pro Tyr Glu Tyr Leu Ala Asp Glu Phe Thr Cys Met Asp Cys Gly Ser Gly Gln Trp Pro Thr Ala Asp Leu Thr 550 555 560 Gly Cys Tyr Asp Leu Pro Glu Asp Tyr Ile Arg Trp Glu Asp Ala Trp Ala Ile Gly Pro Val Thr Ile Ala Cys Leu Gly Phe Met Cys Thr Cys Met Val Val Thr Val Phe Ile Lys His Asn Asn Thr Pro Leu Val Lys Ala Ser Gly Arg Glu Leu Cys Tyr Ile Leu Leu Phe Gly Val Gly Leu Ser Tyr Cys Met Thr Phe Phe Phe Ile Ala Lys Pro Ser Pro Val Ile Cys Ala Leu Arg Arg Leu Gly Leu Gly Ser Ser Phe Ala Ile Cys Tyr Ser Ala Leu Leu Thr Lys Thr Asn Cys Ile Ala Arg Ile Phe Asp Gly Val Lys Asn Gly Ala Gln Arg Pro Lys Phe Ile Ser Pro Ser Ser Gln Val Phe Ile Cys Leu Gly Leu Ile Leu Val Gln Ile Val Met Val Ser Val Trp Leu Ile Leu Glu Ala Pro Gly Thr Arg Arg Tyr Thr Leu Ala 710 715 Glu Lys Arg Glu Thr Val Ile Leu Lys Cys Asn Val Lys Asp Ser Ser

735 730 725 Met Leu Ile Ser Leu Thr Tyr Asp Val Ile Leu Val Ile Leu Cys Thr 740 745 750 Val Tyr Ala Phe Lys Thr Arg Lys Cys Pro Glu Asn Phe Asn Glu Ala 760 755 Lys Phe Ile Gly Phe Thr Met Tyr Thr Thr Cys Ile Ile Trp Leu Ala 770 780 Phe Leu Pro Ile Phe Tyr Val Thr Ser Ser Asp Tyr Arg Val Gln Thr 785 790 795 800 Thr Thr Met Cys Ile Ser Val Ser Leu Ser Gly Phe Val Val Leu Gly 810 815 805 Cys Leu Phe Ala Pro Lys Val His Ile Ile Leu Phe Gln Pro Gln Lys 825 830 820 Asn Val Val Thr His Arg Leu His Leu Asn Arg Phe Ser Val Ser Gly 840 Thr Gly Thr His Ile Leu Ser Val Leu 855 857

<210> 1224 <211> 69 <212> PRT <213> Homo sapiens

<210> 1225 <211> 55 <212> PRT <213> Homo sapiens

<210> 1226

<211> 51 <212> PRT <213> Homo sapiens

<210> 1227 <211> 47 <212> PRT <213> Homo sapiens

<210> 1228 <211> 60 <212> PRT <213> Homo sapiens

<210> 1229 <211> 52 <212> PRT <213> Homo sapiens

<400> 1229
Met Cys Glu Ser Thr Glu Leu Asn Met Thr Phe His Leu Phe Ile Val

<210> 1230 <211> 362 <212> PRT <213> Homo sapiens

<400> 1230

Met Pro Val Ile Trp Ser Ala Leu Ser Ala Val Leu Leu Leu Ala Ser 1 1.0 Ser Tyr Phe Val Gly Ala Leu Ile Val His Ala Asp Cys Phe Leu Met 25 Arg Asn His Thr Ile Thr Glu Gln Pro Met Cys Phe Gln Arg Thr Thr Pro Leu Ile Leu Gln Glu Val Ala Ser Phe Leu Lys Arg Asn Lys His 55 60 Gly Pro Phe Leu Leu Phe Val Ser Phe Leu His Val His Ile Pro Leu 65 70 75 Ile Thr Met Glu Asn Phe Leu Gly Lys Ser Leu His Gly Leu Tyr Gly 85 90 Asp Asn Val Lys Glu Met Asp Trp Met Val Gly Arg Ile Leu Asp Thr 100 105 110 Leu Asp Val Glu Gly Leu Ser Asn Ser Thr Leu Ile Tyr Phe Thr Ser 120 Asp His Gly Gly Ser Leu Glu Asn Gln Leu Gly Asn Thr Gln Tyr Gly 135 140 Gly Trp Asn Gly Ile Tyr Lys Gly Gly Lys Gly Met Gly Gly Trp Glu 155 150 Gly Gly Ile Arg Val Pro Gly Ile Phe Arg Trp Pro Gly Val Leu Pro 165 170 175 Ala Gly Arg Val Ile Gly Glu Pro Thr Ser Leu Met Asp Val Phe Pro 190 185 180 Thr Val Val Arg Leu Ala Gly Ser Glu Val Pro Gln Asp Arg Val Ile 200 205 195 Asp Gly Gln Asp Leu Leu Pro Leu Leu Leu Gly Thr Ala Gln His Ser 215 Asp His Glu Phe Leu Met His Tyr Cys Glu Arg Phe Leu His Ala Ala 235 230 Arg Trp His Gln Arg Asp Arg Gly Thr Met Trp Lys Val His Phe Val 250 245 Thr Pro Val Phe Gln Pro Arg Gly Ser Arg Cys Leu Leu Trp Lys Glu 260 265 270 Lys Val Cys Pro Cys Phe Gly Glu Lys Ser Ser Pro Pro Arg Ser His 275 280 Pro Cys Phe Phe Asp Leu Ser Arg Ala Pro Ser Glu Thr His Ile Leu 300 295 Thr Pro Ala Ser Glu Pro Val Phe Tyr Gln Val Met Glu Arg Ser Pro 315 310 Ala Gly Gly Val Gly Thr Pro Ala Asp Thr Gln Pro Ser Ser Ala 325 330

<210> 1231 <211> 53 <212> PRT <213> Homo sapiens

<210> 1232 <211> 56 <212> PRT <213> Homo sapiens

. 50 52

<210> 1233 <211> 56 <212> PRT <213> Homo sapiens

<210> 1234 <211> 125 <212> PRT <213> Homo sapiens

<400> 1234 Met Leu Ser Gln Leu Pro Arg Cys Gln Ser Ser Val Pro Ala Leu Ala 5 10 His Pro Thr Arg Leu His Tyr Leu Leu Arg Leu Leu Thr Phe Leu Leu 20 25 Gly Pro Gly Ala Gly Gly Ala Glu Ala Gln Gly Met Leu Gly Arg Ala 40 Leu Leu Leu Ser Ser Leu Pro Asp Asn Cys Ser Phe Trp Asp Ala Phe 55 60 Arg Pro Glu Gly Arg Arg Ser Val Leu Arg Thr Ile Gly Glu Tyr Leu 65 70 75 Glu Gln Asp Glu Glu Gln Pro Thr Pro Ser Gly Phe Glu Pro Thr Val 90 Asn Pro Ser Ser Gly Ile Ser Lys Met Glu Leu Leu Ala Cys Phe Ser 105 100 Val Ser Ala Leu Pro Glu Gly Lys Leu Leu Glu Gln * 115 120 124

<210> 1235 <211> 72 <212> PRT <213> Homo sapiens

<400> 1235 Met Phe Cys Phe Leu His Val Phe Leu Val Ser Leu Pro Phe Leu Thr 5 1 10 Ser Tyr Ser Cys Leu Gln Ile Ile Ser Tyr Ser Ser Phe Lys Ala Trp 20 25 Phe Lys Tyr Pro Phe Leu Cys Lys Ile Phe Pro Thr Leu Pro Asn Asn 35 40 45 Asp Ser Leu Gln Gln Thr Pro Leu Val His Gly Val Cys Leu Gln Gln 55 Gly Val His His Arg Leu Ile * 70 71

<210> 1236 <211> 48 <212> PRT <213> Homo sapiens

Arg Ala Gly Gly Leu Gly Phe Thr His Cys Gln Ala Asn Ser Thr Thr 35 40 45 48

<210> 1237 <211> 208 <212> PRT <213> Homo sapiens

<400> 1237 Met Ala Phe Leu Arg Lys Val Tyr Ser Ile Leu Ser Leu Gln Val Leu 10 Leu Thr Thr Val Thr Ser Thr Val Phe Leu Tyr Phe Glu Ser Val Arg 20 25 Thr Phe Val His Glu Ser Pro Ala Leu Ile Leu Leu Phe Ala Leu Gly 40 Ser Leu Gly Leu Ile Phe Ala Leu Ile Leu Asn Arg His Lys Tyr Pro 55 Leu Asn Leu Tyr Leu Leu Phe Gly Phe Thr Leu Leu Glu Ala Leu Thr 75 70 Val Ala Val Val Thr Phe Tyr Asp Val Tyr Ile Ile Leu Gln Ala 8.5 90 Phe Ile Leu Thr Thr Thr Val Phe Phe Gly Leu Thr Val Tyr Thr Leu 100 105 110 Gln Ser Eys Lys Asp Phe Ser Lys Phe Gly Ala Gly Leu Phe Ala Leu 120 125 Leu Trp Ile Leu Cys Leu Ser Gly Phe Leu Lys Phe Phe Phe Tyr Ser 135 Glu Ile Met Glu Leu Val Leu Ala Ala Ala Gly Ala Leu Leu Phe Cys 150 155 160 Gly Phe Ile Ile Tyr Asp Thr His Ser Leu Met His Lys Leu Ser Pro 165 170 175 Glu Glu Tyr Val Leu Ala Ala Ile Ser Leu Tyr Leu Asp Ile Ile Asn 180 185 190 Leu Phe Leu His Leu Leu Arg Phe Leu Glu Ala Val Asn Lys Lys * 200

<210> 1238
<211> 173
<212> PRT
<213> Homo sapiens

70 75 65 Asn Phe Gly Phe Ser Leu Leu Arg Lys Ile Ser Met Arg His Asp Gly 85 90 Asn Met Val Phe Ser Pro Phe Gly Met Ser Leu Ala Met Thr Gly Leu 105 110 100 Met Leu Gly Ala Thr Gly Pro Thr Glu Thr Gln Ile Lys Arg Gly Leu 125 115 120 His Leu Gln Ala Leu Lys Pro Thr Lys Pro Gly Leu Leu Pro Ser Leu 140 130 135 Phe Lys Gly Leu Arg Glu Thr Leu Ser Arg Asn Leu Glu Leu Gly Leu 150 155 Thr Ala Gly Glu Phe Cys Leu His Pro Gln Gly Phe * 170 172

<210> 1239 <211> 357 <212> PRT

<213> Homo sapiens

<400> 1239 Met Ala Phe Leu Gly Leu Phe Ser Leu Leu Val Leu Gln Ser Met Ala 10 Thr Gly Ala Thr Phe Pro Glu Glu Ala Ile Ala Asp Leu Ser Val Asn 20 25 Met Tyr Asn Arg Leu Arg Ala Thr Gly Glu Asp Glu Asn Ile Leu Phe 40 Ser Pro Leu Ser Ile Ala Leu Ala Met Gly Met Met Glu Leu Gly Ala 55 Gln Gly Ser Thr Gln Lys Glu Ile Arg His Ser Met Gly Tyr Asp Ser 75 Leu Lys Asn Gly Glu Glu Phe Ser Phe Leu Lys Glu Phe Ser Asn Met 85 Val Thr Ala Lys Glu Ser Gln Tyr Val Met Lys Ile Ala Asn Ser Leu 110 105 100 Phe Val Gln Asn Gly Phe His Val Asn Glu Glu Phe Leu Gln Met Met 120 125 Lys Lys Tyr Phe Asn Ala Ala Val Asn His Val Asp Phe Ser Gln Asn 135 140 Val Ala Val Ala Asn Tyr Ile Asn Lys Trp Val Glu Asn Asn Thr Asn 150 155 Asn Leu Val Lys Asp Leu Val Ser Pro Arg Asp Phe Asp Ala Ala Thr 175 170 165 Tyr Leu Ala Leu Ile Asn Ala Val Tyr Phe Lys Gly Asn Trp Lys Ser 185 190 180 Gln Phe Arg Pro Glu Asn Thr Arg Thr Phe Ser Phe Thr Lys Asp Asp 200 205 195 Glu Ser Glu Val Gln Ile Pro Met Met Tyr Gln Gln Gly Glu Phe Tyr 215 220 Tyr Gly Glu Phe Ser Asp Gly Ser Asn Glu Ala Gly Gly Ile Tyr Gln 235 230 225 Val Leu Glu Ile Pro Tyr Glu Gly Asp Glu Ile Ser Met Met Leu Val 245 250 Leu Ser Arg Gln Glu Val Pro Leu Ala Thr Leu Glu Pro Leu Val Lys 265 270 260 Ala Gln Leu Val Glu Glu Trp Ala Asn Ser Val Lys Lys Gln Lys Val 280

<210> 1240 <211> 707 <212> PRT <213> Homo sapiens

<400> 1240 Met Leu Ser Leu Arg Arg Cys Thr Ser Met Arg Leu Cys Leu Ser Ser 10 Ser Leu Ala Ser Pro Cys Ser Thr Met Leu Ser Thr Val Val Leu Tyr 20 25 Lys Val Cys Asn Ser Phe Val Glu Met Gly Ser Ala Asn Val Gln Ala 40 Thr Asp Tyr Leu Lys Gly Val Ala Ser Leu Phe Val Val Ser Leu Gly 60 55 Gly Ala Ala Val Gly Leu Val Phe Ala Phe Leu Leu Ala Leu Thr Thr 70 75 Arg Phe Thr Lys Arg Val Arg Ile Ile Glu Pro Leu Leu Val Phe Leu 85 90 Leu Ala Tyr Ala Ala Tyr Leu Thr Ala Glu Met Ala Ser Leu Ser Ala 105 Ile Leu Ala Val Thr Met Cys Gly Leu Gly Cys Lys Lys Tyr Val Glu 120 125 Ala Asn Ile Ser His Lys Ser Arg Thr Thr Val Lys Tyr Thr Met Lys 135 140 Thr Leu Ala Ser Cys Ala Glu Thr Val Ile Phe Met Leu Leu Gly Ile 150 155 Ser Thr Val Asp Ser Ser Lys Trp Ala Trp Asp Ser Gly Leu Val Leu 165 170 175 Gly Thr Leu Ile Phe Ile Leu Phe Phe Arg Ala Leu Gly Val Val Leu 185 190 180 Gln Thr Trp Val Leu Asn Gln Phe Arg Leu Val Pro Leu Asp Lys Ile 200 195 Asp Gln Val Val Met Ser Tyr Gly Gly Leu Arg Gly Ala Val Ala Phe 215 220 Ala Leu Val Ile Leu Leu Asp Arg Thr Lys Val Pro Ala Lys Asp Tyr 230 235 Phe Val Ala Thr Thr Ile Val Val Val Phe Phe Thr Val Ile Val Gln 245 250 Gly Leu Thr Ile Lys Pro Leu Val Lys Trp Leu Lys Val Lys Arg Ser 260 265 Glu His His Lys Pro Thr Leu Asn Gln Glu Leu His Glu His Thr Phe 280 Asp His Ile Leu Ala Ala Val Glu Asp Val Val Gly His His Gly Tyr 295 300 His Tyr Trp Arg Asp Arg Trp Glu Gln Phe Asp Lys Lys Tyr Leu Ser

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305
                  310
                                    315
Gln Leu Leu Met Arg Arg Ser Ala Tyr Arg Ile Arg Asp Gln Ile Trp
           325
                          330
Asp Val Tyr Tyr Arg Leu Asn Ile Arg Asp Ala Ile Ser Phe Val Asp
                  345
           340
Gln Gly Gly His Val Leu Ser Ser Thr Gly Leu Thr Leu Pro Ser Met
                         360
Pro Ser Arg Asn Ser Val Ala Glu Thr Ser Val Thr Asn Leu Leu Arg
                    375
                              380
Glu Ser Gly Ser Gly Ala Cys Leu Asp Leu Gln Val Ile Asp Thr Val
                  390
                                   395
Arg Ser Gly Arg Asp Arg Glu Asp Ala Val Met His His Leu Leu Cys
             405
                            410
Gly Gly Leu Tyr Lys Pro Arg Arg Arg Tyr Lys Ala Ser Cys Ser Arg
         420
                           425
                                     430
His Phe Ile Ser Glu Asp Ala Gln Glu Arg Gln Asp Lys Glu Val Phe
                      440
                                 445
Gln Gln Asn Met Lys Arg Arg Leu Glu Ser Phe Lys Ser Thr Lys His
  450 455
Asn Ile Cys Phe Thr Lys Ser Lys Pro Arg Pro Arg Lys Thr Gly Arg
                 470
                                  475
Arg Lys Lys Asp Gly Val Ala Asn Ala Glu Ala Thr Asn Gly Lys His
              485
                               490
Arg Gly Leu Gly Phe Gln Asp Thr Ala Ala Val Ile Leu Thr Val Glu
          500
                          505
Ser Glu Glu Glu Glu Glu Ser Asp Ser Ser Glu Thr Glu Lys Glu
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                                525
Asp Asp Glu Gly Ile Ile Phe Val Ala Arg Ala Thr Ser Glu Val Leu
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                                     540
Gln Glu Gly Lys Val Ser Gly Ser Leu Glu Val Cys Pro Ser Pro Arg
                550
                                   555
Ile Ile Pro Pro Ser Pro Thr Cys Ala Glu Lys Glu Leu Pro Trp Lys
             565
                                570
                                                575
Ser Gly Gln Gly Asp Leu Ala Val Tyr Val Ser Ser Glu Thr Thr Lys
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                           585
                                     590
Ile Val Pro Val Asp Met Gln Thr Gly Trp Asn Gln Ser Ile Ser Ser
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                                   605
Leu Glu Ser Leu Ala Ser Pro Pro Cys Asn Gln Ala Pro Ile Leu Thr
                   615
                                      620
Cys Leu Pro Pro His Pro Arg Gly Thr Glu Glu Pro Gln Val Pro Leu
                630
                                  635
His Leu Pro Ser Asp Pro Arg Ser Ser Phe Ala Phe Pro Pro Ser Leu
              645
                               650
Ala Lys Ala Gly Arg Ser Arg Ser Glu Ser Ser Ala Asp Leu Pro Gln
         660
                  665
Gln Gln Glu Leu Gln Pro Leu Met Gly His Lys Asp His Thr His Leu
           . 680
                                          685
Ser Pro Gly Thr Ala Thr Ser His Trp Cys Ile Gln Phe Asn Arg Gly
                     695
                                       700
Ser Arg Leu
705 707
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<210> 1241 <211> 98 <212> PRT <213> Homo sapiens

<400> 1241 Met Ala Phe Arg Thr Phe Ser Trp Ile Phe Ser Gly Leu Leu Ser Pro Thr Leu Ala Ser Pro Ser Val Ser Met Met Thr Met Glu Val Leu Leu 25 20 Ser Gly Ile Leu Cys Ser Ser Arg Ala Leu Phe Ser Ile Leu Met Pro 3.5 40 45 Leu Ser Ser Pro Ser Leu Met Leu Val Ile Pro Leu Ser Ser Met Leu 55 60 Phe Thr Asn Val Leu Ala Ser Trp Arg Phe Ser Gly Val Ala Trp Thr 70 Lys Cys Ser Phe His Val Asp Thr Ser Pro Leu Asn Arg Met Lys Phe Arg * 97

<210> 1242 <211> 422 <212> PRT <213> Homo sapiens

<400> 1242 Met Val Leu Trp Glu Ser Pro Arg Gln Cys Ser Ser Trp Thr Leu Cys 10 Glu Gly Phe Cys Trp Leu Leu Leu Pro Val Met Leu Leu Ile Val 20 25 Ala Arg Pro Val Lys Leu Ala Ala Phe Pro Thr Ser Leu Ser Asp Cys 40 Gln Thr Pro Thr Gly Trp Asn Cys Ser Gly Tyr Asp Asp Arg Glu Asn 5.5 60 Asp Leu Phe Leu Cys Asp Thr Asn Thr Cys Lys Phe Asp Gly Glu Cys 70 Leu Arg Ile Gly Asp Thr Val Thr Cys Val Cys Gln Phe Lys Cys Asn Asn Asp Tyr Val Pro Val Cys Gly Ser Asn Gly Glu Ser Tyr Gln Asn 105 110 100 Glu Cys Tyr Leu Arg Gln Ala Ala Cys Lys Gln Gln Ser Glu Ile Leu 115 120 125 Val Val Ser Glu Gly Ser Cys Ala Thr Asp Ala Gly Ser Gly Ser Gly 135 140 Asp Gly Val His Glu Gly Ser Gly Glu Thr Ser Gln Lys Glu Thr Ser 150 155 Thr Cys Asp Ile Cys Gln Phe Gly Ala Glu Cys Asp Glu Asn Ala Glu 165 170 Asp Val Trp Cys Val Cys Asn Ile Asp Cys Ser Gln Thr Asn Phe Asn 180 185 190 Pro Leu Cys Ala Ser Asp Gly Lys Ser Tyr Asp Asn Ala Cys Gln Ile 195 200 205 Lys Glu Ala Ser Cys Gln Lys Gln Glu Lys Ile Glu Val Leu Ser Leu 215 220 Gly Arg Cys Gln Asp Asn Thr Thr Thr Thr Thr Lys Ser Glu Asp Gly 235 230 His Tyr Ala Arg Thr Asp Tyr Ala Glu Asn Ala Asn Lys Leu Glu Glu 250 Ser Ala Arg Glu His His Ile Pro Cys Pro Glu His Tyr Asn Gly Phe

260 265 Cys Met His Gly Lys Cys Glu His Ser Ile Asn Met Gln Glu Pro Ser 280 285 Cys Arg Cys Asp Ala Gly Tyr Thr Gly Gln His Cys Glu Lys Lys Asp 295 300 Tyr Ser Val Leu Tyr Val Val Pro Gly Pro Val Arg Phe Pro Val Cys 305 310 315 320 Leu Asn Arg Ser Cys Asp Trp Asn Asn Ser Asp Cys Cys His Leu Cys 330 325 Gly Gly Pro Leu His His Lys Glu Met Pro Pro Glu Ala Asn Arg Ile 345 350 Pro Pro Asp Arg Ser Lys Ile Pro Gly His Tyr Ser Ser Arg Gln Tyr 355 360 365 Asn Lys Ser Arg Pro Thr Arg Leu Ile Leu Lys Gly Ala Cys Phe His 380 370 375 Ser Gly Trp Thr Thr Glu Ser Leu Asp Tyr Thr Ile Gln Tyr Tyr Arg 390 395 400 Gln Lys Asn Lys Thr Arg Asp Leu Thr His Val Cys Leu Ala Phe Val 405 410 Gly Asn Leu His Gln * 420 421

<210> 1243 <211> 46 <212> PRT <213> Homo sapiens

<210> 1244 <211> 46 <212> PRT <213> Homo sapiens

<210> 1245 <211> 244 <212> PRT

<213> Homo sapiens

<400> 1245 Met Ala Gly Val Ile Ala Gly Leu Leu Met Phe Ile Ile Ile Leu Leu 10 Gly Val Met Leu Thr Ile Lys Arg Arg Arg Asn Ala Tyr Ser Tyr Ser 20 25 Tyr Tyr Leu Lys Leu Ala Lys Lys Gln Lys Glu Thr Gln Ser Gly Ala 40 35 Gln Arg Glu Met Gly Pro Val Ala Ser Ala Asp Lys Pro Thr Thr Lys 5.5 Leu Ser Ala Ser Arg Asn Asp Glu Gly Phe Ser Ser Ser Ser Gln Asp 70 75 Val Asn Gly Phe Asn Gly Ser Arg Gly Glu Leu Ser Gln Pro Thr Leu 85 Thr Ile Gln Thr His Pro Tyr Arg Thr Cys Asp Pro Val Glu Met Ser 100 105 Tyr Pro Arg Asp Gln Phe Gln Pro Ala Ile Arg Val Ala Asp Leu Leu 120 Gln His Ile Thr Gln Met Lys Arg Gly Gln Gly Tyr Gly Phe Lys Glu 135 Glu Tyr Glu Ala Leu Pro Glu Gly Gln Thr Ala Ser Trp Asp Thr Ala 150 155 Lys Glu Asp Glu Asn Arg Asn Lys Asn Arg Tyr Gly Asn Ile Ile Ser 170 165 Tyr Asp His Ser Arg Val Arg Leu Leu Val Leu Asp Gly Asp Pro His 185 190 180 Ser Asp Tyr Ile Asn Ala Asn Tyr Ile Asp Gly Tyr His Arg Pro Arg 205 195 200 His Tyr Ile Ala Thr Gln Gly Pro Met Gln Glu Thr Val Lys Asp Phe 215 220 Trp Arg Met Ile Trp Gln Glu Asn Ser Ala Ser Ile Val Met Val Thr 230 225 Asn Pro Gly * . 243

<210> 1246 <211> 565 <212> PRT <213> Homo sapiens

<400> 1246 Met Ala Val Phe Arg Ser Gly Leu Leu Val Leu Thr Thr Pro Leu Ala 10 Ser Leu Ala Pro Arg Leu Ala Ser Ile Leu Thr Ser Ala Ala Arg Leu 25 Val Asn His Thr Leu Tyr Val His Leu Gln Pro Gly Met Ser Leu Glu 35 40 Gly Pro Ala Gln Pro Gln Tyr Ser Pro Val Gln Ala Thr Phe Glu Val 55 Leu Asp Phe Ile Thr His Leu Tyr Ala Gly Ala Asp Val His Arg His 75 70 Leu Asp Val Arg Ile Leu Leu Thr Asn Ile Arg Thr Lys Ser Thr Phe 90 85 Leu Pro Pro Leu Pro Thr Ser Val Gln Asn Leu Ala His Pro Pro Glu

			100					105					110		
Val	Val	Leu 115		Asp	Phe	Gln	Thr 120		Asp	Gly	ser	Gln 125		Asn	Pro
Val	Lys 130	Gln	Gln	Leu	Val	Arg 135	Tyr	Ala	Thr	Ser	Cys 140	Tyr	Ser	Cys	Cys
Pro 145	Arg	Leu	Ala	Ser	Val 150	Leu	Leu	Tyr	Ser	Asp 155	Tyr	Gly	Ile	Gly	Glu 160
Val	Pro	Val	Glu	Pro 165	Leu	Asp	Val	Pro	Leu 170	Pro	Ser	Thr	Ile	Arg 175	Pro
Ala	Ser	Pro	Val 180	Ala	Gly	Ser	Pro	Lys 185	Gln	Pro	Val	Arg	Gly 190	Tyr	Tyr
		195		-	-	Thr	200	_	_			205			_
	210					Cys 215					220				
225			_	_	230	Leu		_		235					240
				245		Arg			250					255	
_		_	260			Thr		265					270		
		275				Asp	280					285			
	290					Gly 295					300				
305	_				310	Ala		_		315					320
				325		Glu			330					335	
			340			Asn -		345					350		
		355				Tyr	360					365			
	370	_				Ala 375					380				
385		_		-	390	Leu	_			395	_				400
				405		Val			410					415	
-	_	_	420			Arg Ile	-	425		_			430		
		435				Glu	440					445			
	450					455 Ala					460				
465					470					475					480
				485		Arg			490					495	
			500			Met		505					510		
		515				Leu	520					525			
	530					535 Leu					540				
545	Ala			*	550	Leu	neu.	J.11	-73	555		110	~, s	~	560
		•	564												

<210> 1247 <211> 737 <212> PRT <213> Homo sapiens

<400> 1247 Met Phe Pro Ala Gly Pro Pro Trp Pro Arg Val Arg Val Val Gln Val 10 Leu Trp Ala Leu Leu Ala Val Leu Leu Ala Ser Trp Arg Leu Trp Ala 20 25 Ile Lys Asp Phe Gln Glu Cys Thr Trp Gln Val Val Leu Asn Glu Phe 35 40 Lys Arg Val Gly Glu Ser Gly Val Ser Asp Ser Phe Phe Glu Gln Glu Pro Val Asp Thr Val Ser Ser Leu Phe His Met Leu Val Asp Ser Pro 65 70 75 Ile Asp Pro Ser Glu Lys Tyr Leu Gly Phe Pro Tyr Tyr Leu Lys Ile 90 85 Asn Tyr Ser Cys Glu Glu Lys Pro Ser Glu Asp Leu Val Arg Met Gly 110 100 105 His Leu Thr Gly Leu Lys Pro Leu Val Leu Val Thr Phe Gln Ser Pro 120 125 Val Asn Phe Tyr Arg Trp Lys Ile Glu Gln Leu Gln Ile Gln Met Glu 135 Ala Ala Pro Phe Arg Ser Lys Gly Gly Pro Gly Gly Gly Gly Arg Asp 150 155 Arg Asn Leu Ala Gly Met Asn Ile Asn Gly Phe Leu Lys Arg Asp Arg 165 170 175 Asp Asn Asn Ile Gln Phe Thr Val Gly Glu Leu Phe Asn Leu Met 180 185 190 Pro Gln Tyr Phe Val Gly Val Ser Ser Arg Pro Leu Trp His Thr Val 195 200 205 Asp Gln Ser Pro Val Leu Ile Leu Gly Gly Ile Pro Asn Glu Lys Tyr 215 Val Leu Met Thr Asp Thr Ser Phe Lys Asp Phe Ser Leu Val Glu Val 235 230 Asn Gly Val Gly Gln Met Leu Ser Ile Asp Ser Cys Trp Val Gly Ser 250 245 Phe Tyr Cys Pro His Ser Gly Phe Thr Ala Thr Ile Tyr Asp Thr Ile 260 265 270 Ala Thr Glu Ser Thr Leu Phe Ile Arg Gln Asn Gln Leu Val Tyr Tyr 275 280 285 Phe Thr Gly Thr Tyr Thr Thr Leu Tyr Glu Arg Asn Arg Gly Ser Gly 295 300 Glu Cys Ala Val Ala Gly Pro Thr Pro Gly Glu Gly Thr Leu Val Asn 310 315 Pro Ser Thr Glu Gly Ser Trp Ile Arg Val Leu Ala Ser Glu Cys Ile 325 330 335 Lys Lys Leu Cys Pro Val Tyr Phe His Ser Asn Gly Ser Glu Tyr Ile 340 345 Met Ala Leu Thr Thr Gly Lys His Glu Gly Tyr Val His Phe Gly Thr 365 360 Ile Arg Val Thr Thr Cys Ser Ile Ile Trp Ser Glu Tyr Ile Ala Gly 375 Glu Tyr Thr Leu Leu Leu Val Glu Ser Gly Tyr Gly Asn Ala Ser

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390
                               395
385
Lys Arg Phe Gln Val Val Ser Tyr Asn Thr Ala Ser Asp Asp Leu Glu
         405
                       410
Leu Leu Tyr His Ile Pro Glu Phe Ile Pro Glu Ala Arg Gly Leu Glu
                                 430
             425
       420
Phe Leu Met Ile Leu Gly Thr Glu Ser Tyr Thr Ser Thr Ala Met Ala
435 440
Pro Lys Gly Ile Phe Cys Asn Pro Tyr Asn Asn Leu Ile Phe Ile Trp
          455 460
Gly Asn Phe Leu Leu Gln Ser Ser Asn Lys Glu Asn Phe Ile Tyr Leu
                              475
             470
Ala Asp Phe Pro Lys Glu Leu Ser Ile Lys Tyr Met Ala Arg Ser Phe
                                             495
                            490
     485
Arg Gly Ala Val Ala Ile Val Thr Glu Thr Glu Glu Ile Trp Tyr Leu
                505 510
       500
Leu Glu Gly Ser Tyr Arg Val Tyr Gln Leu Phe Pro Ser Lys Gly Trp
             520
                              525
Gln Val His Ile Ser Leu Lys Leu Met Gln Gln Ser Ser Leu Tyr Ala
          535
                                  540
Ser Asn Glu Thr Met Leu Thr Leu Phe Tyr Glu Asp Ser Lys Leu Tyr
545 550
Gln Leu Val Tyr Leu Met Asn Asn Gln Lys Gly Gln Leu Val Lys Arg
          565
                           570
Leu Val Pro Val Glu Gln Leu Leu Met Tyr Gln Gln His Thr Ser His
               585
        580
Tyr Asp Leu Glu Arg Lys Gly Gly Tyr Leu Met Leu Ser Phe Ile Asp
           600 605
Phe Cys Pro Phe Ser Val Met Arg Leu Arg Ser Leu Pro Ser Pro Gln
                                 620
                  615
Arg Tyr Thr Arg Gln Glu Arg Tyr Arg Ala Arg Pro Pro Arg Val Leu
                              635
625 630
Glu Arg Ser Gly Phe Pro Gln Gly Glu Leu Ala Arg His Leu Pro Gly
            645
                            650
Pro Gly Leu Leu Pro Ala Val Ala Ala Leu Arg Val Arg Gln Ala Val
         660
                         665
Arg Gly Pro Gly Ala Arg Pro His Leu Ala Leu Val Gly Glu Gln Gln
              680 685
Thr Arg Pro Gly Leu Leu Leu Leu Gly Glu Gln Leu Ala Lys Arg
                  695 700
Gly Arg Arg Val His Arg Asn Gly Gln Leu Arg Lys Asp Leu Gln Pro
                               715
705 710
Arg Val Arg Val Arg Ala Ala Gly Ala His Phe Pro Gly Gln Gly His
                                             735 736
            725
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<210> 1248 <211> 175 <212> PRT <213> Homo sapiens

Pro Pro His Leu Ser His Trp Cys Leu Ser Pro Met Gln Met Asp Asp 40 Gly Cys Ala Arg Leu Cys Val Leu Trp Thr Ala Trp Met Arg Trp Arg Val Leu Met Cys Ser Cys Arg Val Trp Ala Thr Asp Leu Gly Ile Phe
65 70 75 80 70 75 Leu Gly Val Ala Leu Gly Asn Glu Pro Leu Glu Met Trp Pro Leu Thr 90 95 85 Gln Asn Glu Glu Cys Thr Val Thr Gly Phe Leu Arg Asp Lys Leu Gln 105 Tyr Arg Ser Arg Leu Gln Tyr Met Lys His Tyr Phe Pro Ile Asn Tyr 115 120 125 Lys Ile Arg Val Pro Tyr Glu Gly Val Phe Arg Ile Ala Asn Val Thr 140 135 Arg Leu Arg Ala Gln Gly Ser Glu Arg Glu Leu Arg Tyr Leu Gly Val 150 155 160 Leu Val Ser Leu Ser Ala Thr Glu Ser Val His Asp Glu Leu Leu 165 170

<210> 1249 <211> 68 <212> PRT <213> Homo sapiens

<210> 1250 <211> 209 <212> PRT <213> Homo sapiens

85 90 Ala Phe Phe Ile Ala Cys Val Thr Ser Phe Ser Ile Phe Glu Lys Thr 105 100 110 Ser Glu Glu Glu Leu Gln Leu Lys Ser Phe Ser Ile Ser Val Arg Lys 115 120 125 Tyr Leu Pro Cys Phe Thr Phe Leu Ser Arg Ile Ile Gln Tyr Leu Phe 130 135 140 Leu Ile Ser Val Ile Thr Met Val Leu Leu Thr Leu Met Thr Val Thr 145 150 155 160 Leu Asp Pro Pro Gln Lys Leu Pro Asp Leu Phe Ser Val Leu Val Cys 165 170 175 Phe Val Ser Cys Leu Asn Phe Leu Phe Phe Leu Val Tyr Phe Asn Ile 180 185 190 Ile Ile Met Trp Asp Ser Lys Ser Gly Arg Asn Gln Lys Lys Ile Ser 195 200 205 208

<210> 1251 <211> 58 <212> PRT <213> Homo sapiens

<210> 1252 <211> 84 <212> PRT <213> Homo sapiens

<400> 1252 Met Tyr Lys Asn Phe Cys Leu Phe Phe Ile Phe Ala Leu Tyr Gln Gly 10 15 Leu Ala Asn Tyr Gly Leu Trp Ala Asn Ser Asn Pro Leu His Val Ser 20 25 Val Tyr Lys Ile Leu Leu Gly Cys Val Pro Trp Leu Leu Ser Val Val 35 40 Ser Ala Ser Arg Val Ala Gly Thr Thr Gly Thr His His Tyr Ala Trp 55 6.0 Ile Ile Phe Cys Ile Phe Ser Thr Asp Gly Val Ser Pro Arg Trp Pro 75 65 70 Arg Trp Ser * 83

<210> 1253 <211> 73 <212> PRT <213> Homo sapiens

<210> 1254 <211> 209 <212> PRT <213> Homo sapiens

<400> 1254 Met Ser Phe Cys Phe Thr Phe Leu Ser Leu Leu Pro Ala Cys Ile Lys 10 5 Leu Ile Leu Gln Pro Ser Ser Lys Gly Phe Lys Phe Thr Leu Val Ser 25 20 Cys Ala Leu Ser Phe Phe Leu Phe Ser Phe Gln Val His Glu Lys Ser 40 Ile Leu Leu Val Ser Leu Pro Val Cys Leu Val Leu Ser Glu Ile Pro 60 55 Phe Met Ser Thr Trp Phe Leu Leu Val Ser Thr Phe Ser Met Leu Pro 75 70 Leu Leu Leu Lys Asp Glu Leu Leu Met Pro Ser Val Val Thr Thr Met 90 85 Ala Phe Phe Ile Ala Cys Val Thr Ser Phe Ser Ile Phe Glu Lys Thr 110 105 Ser Glu Glu Glu Leu Gln Leu Lys Ser Phe Ser Ile Ser Val Arg Lys 125 120 Tyr Leu Pro Cys Phe Thr Phe Leu Ser Arg Ile Ile Gln Tyr Leu Phe 140 130 135 Leu Ile Ser Val Ile Thr Met Val Leu Leu Thr Leu Met Thr Val Thr 150 155 Leu Asp Pro Pro Gln Lys Leu Pro Asp Leu Phe Ser Val Leu Val Cys 170 175 165 Phe Val Ser Cys Leu Asn Phe Leu Phe Phe Leu Val Tyr Phe Asn Ile 180 185 190 Ile Ile Met Trp Asp Ser Lys Ser Gly Arg Asn Gln Lys Lys Ile Ser 200

<210> 1255 <211> 730 <212> PRT <213> Homo sapiens

<400> 1255 Met Gly Pro Trp Gly Trp Lys Leu Arg Trp Thr Val Ala Leu Leu Leu 1 5 10 15 Ala Ala Gly Thr Ala Val Gly Asp Arg Cys Glu Arg Asn Glu Phe 25 20 Gln Cys Gln Asp Gly Lys Cys Ile Ser Tyr Lys Trp Val Cys Asp Gly 40 35 Ser Ala Glu Cys Gln Asp Gly Ser Asp Glu Ser Gln Glu Thr Cys Leu 60 55 Ser Val Thr Cys Lys Ser Gly Asp Phe Ser Cys Gly Gly Arg Val Asn 70 Arg Cys Ile Pro Gln Phe Trp Arg Cys Asp Gly Gln Val Asp Cys Asp 85 90 Asn Gly Ser Asp Glu Gln Gly Cys Pro Pro Lys Thr Cys Ser Gln Asp 105 100 Glu Phe Arg Cys His Asp Gly Lys Cys Ile Ser Arg Gln Phe Val Cys 115 120 125 Asp Ser Asp Arg Asp Cys Leu Asp Gly Ser Asp Glu Ala Ser Cys Pro 140 135 Val Leu Thr Cys Gly Pro Ala Ser Phe Gln Cys Asn Ser Ser Thr Cys 155 160 150 Ile Pro Gln Leu Trp Ala Cys Asp Asn Asp Pro Asp Cys Glu Asp Gly 165 170 175 Ser Asp Glu Trp Pro Gln Arg Cys Arg Gly Leu Tyr Val Phe Gln Gly 180 185 190 180 185 Asp Ser Ser Pro Cys Ser Ala Phe Glu Phe His Cys Leu Ser Gly Glu 195 200 Cys Ile His Ser Ser Trp Arg Cys Asp Gly Gly Pro Asp Cys Lys Asp 220 215 Lys Ser Asp Glu Glu Asn Cys Ala Val Ala Thr Cys Arg Pro Asp Glu 235 230 Phe Gln Cys Ser Asp Gly Asn Cys Ile His Gly Ser Arg Gln Cys Asp 255 245 250 Arg Glu Tyr Asp Cys Lys Asp Met Ser Asp Glu Val Gly Cys Val Asn 260 265 270 Val Thr Leu Cys Glu Gly Pro Asn Lys Phe Lys Cys His Ser Gly Glu 285 280 Cys Ile Thr Leu Asp Lys Val Cys Asn Met Ala Arg Asp Cys Arg Asp 300 295 Trp Ser Asp Glu Pro Ile Lys Glu Cys Gly Thr Asn Glu Cys Leu Asp 315 310 Asn Asn Gly Gly Cys Ser His Val Cys Asn Asp Leu Lys Ile Gly Tyr 325 330 335 Glu Cys Leu Cys Pro Asp Gly Phe Gln Leu Val Ala Gln Arg Arg Cys 340 345 350 Glu Asp Ile Asp Glu Cys Gln Asp Pro Asp Thr Cys Ser Gln Leu Cys 360 365 Val Asn Leu Glu Gly Gly Tyr Lys Cys Gln Cys Glu Glu Gly Phe Gln 380 Leu Asp Pro His Thr Lys Ala Cys Lys Ala Val Gly Ser Ile Ala Tyr 395 390 Leu Phe Phe Thr Asn Arg His Glu Val Arg Lys Met Thr Leu Asp Arg 405

Ser Glu Tyr Thr Ser Leu Ile Pro Asn Leu Arg Asn Val Val Ala Leu 420 425 Asp Thr Glu Val Ala Ser Asn Arg Ile Tyr Trp Ser Asp Leu Ser Gln 440 445 Arg Met Ile Cys Ser Thr Gln Leu Asp Arg Ala His Gly Val Ser Ser 455 460 Tyr Asp Thr Val Ile Ser Arg Asp Ile Gln Ala Pro Asp Gly Leu Ala 470 475 Val Asp Trp Ile His Ser Asn Ile Tyr Trp Thr Asp Ser Val Leu Gly 485 490 495 Thr Val Ser Val Ala Asp Thr Lys Gly Val Lys Arg Lys Thr Leu Phe 500 505 510 Arg Glu Asn Gly Ser Lys Pro Arg Ala Ile Val Val Asp Pro Val His 525 520 Gly Phe Met Tyr Trp Thr Asp Trp Gly Thr Pro Ala Lys Ile Lys Lys 540 535 Gly Gly Leu Asn Gly Val Asp Ile Tyr Ser Leu Val Thr Glu Asn Ile 550 555 560 Gln Trp Pro Asn Gly Ile Thr Leu Asp Leu Leu Ser Gly Arg Leu Tyr 565 570 Trp Val Asp Ser Lys Leu His Ser Ile Ser Ser Ile Asp Val Asn Gly 585 Gly Asn Arg Lys Thr Ile Leu Glu Asp Glu Lys Arg Leu Ala His Pro 595 600 Phe Ser Leu Ala Val Phe Glu Asp Lys Val Phe Trp Thr Asp Ile Ile 615 620 Asn Glu Ala Ile Phe Ser Ala Asn Arg Leu Thr Gly Ser Asp Val Asn 630 635 Leu Leu Ala Glu Asn Leu Leu Ser Pro Glu Asp Met Val Leu Phe His 650 655 645 Asn Leu Thr Gln Pro Arg Gly Val Asn Trp Cys Glu Arg Thr Thr Leu 670 665 Ser Asn Gly Gly Cys Gln Tyr Leu Cys Leu Pro Ala Pro Gln Ile Asn 680 675 Pro His Ser Pro Lys Phe Thr Cys Ala Cys Pro Asp Gly Met Leu Leu 700 695 Ala Arg Gly His Glu Glu Leu Pro His Arg Gly Leu Arg Leu Gln Trp 710 715 Pro Pro Arg Arg His Pro Pro Ser Gly * 725

<210> 1256 <211> 264 <212> PRT <213> Homo sapiens

70 65 Arg His Gly Lys Ile Gly Pro Ile Gly Ser Lys Gly Glu Lys Gly Asp 90 8.5 Ser Gly Asp Ile Gly Pro Pro Gly Pro Asn Gly Glu Pro Gly Leu Pro 110 105 100 Cys Glu Cys Ser Gln Leu Arg Lys Ala Ile Gly Glu Met Asp Asn Gln 120 Val Ser Gln Leu Thr Ser Glu Leu Lys Phe Ile Lys Asn Ala Val Ala 140 135 Gly Val Arg Glu Thr Glu Ser Lys Ile Tyr Leu Leu Val Lys Glu Glu .155 150 Lys Arg Tyr Ala Asp Ala Gln Leu Ser Cys Gln Gly Arg Gly Gly Thr 170 165 Leu Ser Met Pro Lys Asp Glu Ala Ala Asn Gly Leu Met Ala Ala Tyr 190 185 Leu Ala Gln Ala Gly Leu Ala Arg Val Phe Ile Gly Ile Asn Asp Leu 205 200 195 Glu Lys Glu Gly Ala Phe Val Tyr Ser Asp His Ser Pro Met Arg Thr 220 215 Phe Asn Lys Trp Arg Ser Gly Glu Pro Asn Asn Ala Tyr Asp Glu Glu 235 230 Asp Cys Val Glu Met Val Ala Ser Gly Gly Trp Asn Asp Val Ala Cys 250 245 His Thr Thr Met Tyr Phe Met 263 260

<210> 1257 <211> 407 <212> PRT <213> Homo sapiens

<400> 1257 Met Ser Gly Ala Pro Thr Ala Gly Ala Ala Leu Met Leu Cys Ala Ala 10 1 Thr Ala Val Leu Leu Ser Ala Gln Gly Gly Pro Val Gln Ser Lys Ser 30 25 20 Pro Arg Phe Ala Ser Trp Asp Glu Met Asn Val Leu Ala His Gly Leu 45 40 35 Leu Gln Leu Gly Gln Gly Leu Arg Glu His Ala Glu Arg Thr Arg Ser 55 Gln Leu Ser Ala Leu Glu Arg Arg Leu Ser Ala Cys Gly Ser Ala Cys 75 70 Gln Gly Thr Glu Gly Ser Thr Asp Leu Pro Leu Ala Pro Glu Ser Arg 90 85 Val Asp Pro Glu Val Leu His Ser Leu Gln Thr Gln Leu Lys Ala Gln 105 110 100 Asn Ser Arg Ile Gln Gln Leu Phe His Lys Val Ala Gln Gln Gln Arg 120 His Leu Glu Lys Gln His Leu Arg Ile Gln His Leu Gln Ser Gln Phe 140 135 Gly Leu Leu Asp His Lys His Leu Asp His Glu Val Ala Lys Pro Ala 155 145 150 Arg Arg Lys Arg Leu Pro Glu Met Ala Gln Pro Val Asp Pro Ala His 175 170 165 Asn Val Ser Arg Leu His Arg Leu Pro Arg Asp Cys Gln Glu Leu Phe 185 180

Gln Val Gly Glu Arg Gln Ser Gly Leu Phe Glu Ile Gln Pro Gln Gly 200 195 Ser Pro Pro Phe Leu Val Asn Cys Lys Met Thr Ser Asp Gly Gly Trp 215 220 Thr Val Ile Gln Arg Arg His Asp Gly Ser Val Asp Phe Asn Arg Pro 230 235 Trp Glu Ala Tyr Lys Ala Gly Phe Gly Asp Pro His Gly Glu Phe Trp 245 250 255 Leu Gly Leu Glu Lys Val His Ser Ile Thr Gly Asp Arg Asn Ser Arg 265 260 Leu Ala Val Gln Leu Arg Asp Trp Asp Gly Asn Ala Glu Leu Leu Gln 275 280 Phe Ser Val His Leu Gly Gly Glu Asp Thr Ala Tyr Ser Leu Gln Leu 295 300 Thr Ala Pro Val Ala Gly Gln Leu Gly Ala Thr Thr Val Pro Pro Ser 310 315 Gly Leu Ser Val Pro Phe Ser Thr Trp Asp Gln Asp His Asp Leu Arg 325 330 335 Arg Asp Lys Asn Cys Ala Lys Ser Leu Ser Gly Gly Trp Trp Phe Gly 340 345 350 Thr Cys Ser His Ser Asn Leu Asn Gly Gln Tyr Phe Arg Ser Ile Pro 355 360 365 Gln Gln Arg Gln Lys Leu Lys Lys Gly Ile Phe Trp Lys Thr Trp Arg 380 375 Gly Arg Tyr Tyr Pro Leu Gln Ala Thr Thr Met Leu Ile Gln Pro Met 395 390 Ala Ala Glu Ala Ala Ser * 405 406

<210> 1258 <211> 120 <212> PRT <213> Homo sapiens

<400> 1258 Met Met Thr Pro Lys Leu Met Ile Trp Leu Leu Leu Gln Ala Lys Ser 10 1 5 Ser Ile Ser Met Leu Glu Lys Ser Ser Lys Cys Leu Gly Arg Cys Phe 25 20 Ser Ser Phe Ala Lys Asn Leu Val Met Ile Gln Ser Cys Val Ser Trp 40 Ala Leu Met Ser Glu Asn Phe Tyr Arg Thr Leu Met Leu Cys Thr Thr 55 60 Thr Leu Leu Pro Ser Thr Gln Glu Cys Val His Leu Pro Leu Gly Ala 65 70 75 Leu Met Gln Lys Arg Ala Lys Asp Ser Phe Cys Thr Thr Thr Gln Arg 85 90 Glu Lys Asp Phe Arg Ile Leu Ser Leu Glu Ser Ser Lys Gln Trp His 100 105 Asn Lys Ser Met Ala Leu Lys * 115

<210> 1259 <211> 160

<212> PRT <213> Homo sapiens

<400> 1259 Met Val Cys Leu Arg Leu Pro Gly Gly Ser Cys Met Ala Val Leu Thr 10 Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala Leu Ala Gly Asp Thr 20 25 Arg Pro Arg Phe Leu Glu Tyr Ser Thr Gly Glu Cys Tyr Phe Phe Asn 40 Gly Thr Glu Arg Val Arg Phe Leu Asp Arg Tyr Phe Tyr Asn Gln Glu 55 Glu Tyr Val Arg Phe Asp Ser Asp Val Gly Glu Tyr Arg Ala Val Thr 70 75 Glu Leu Gly Arg Pro Asp Ala Glu Tyr Leu Glu Gln Pro Glu Gly Arg 95 85 90 Pro Trp Asn Ser Gln Lys Asp Ile Leu Glu Asp Glu Arg Ala Ala Val 105 110 Asp Thr Tyr Cys Arg His Asn Tyr Gly Val Val Glu Ser Phe Thr Val 115 120 Gln Arg Arg Val His Pro Lys Val Thr Val Tyr Pro Ser Lys Thr Gln 135 140 Pro Leu Gln Ala Pro Gln Pro Ala Val Leu Phe Cys Glu Trp Phe * 145 150 155

<210> 1260 <211> 111 <212> PRT

<213> Homo sapiens

<400> 1260 Met Leu Thr Phe Leu Met Leu Val Arg Leu Ser Thr Leu Cys Pro Ser 10 5 Ala Val Leu Gln Arg Leu Asp Arg Leu Val Glu Pro Leu Arg Ala Thr 25 30 Cys Thr Thr Lys Val Lys Ala Asn Ser Val Lys Gln Glu Phe Glu Lys 40 Gln Asp Glu Leu Lys Arg Ser Ala Met Arg Ala Val Ala Ala Leu Leu 60 55 Thr Ile Pro Glu Ala Glu Lys Ser Pro Leu Met Ser Glu Phe Gln Ser 75 70 Gln Ile Ser Ser Asn Pro Glu Leu Ala Ala Ile Phe Glu Ser Ile Gln 90 Lys Asp Ser Ser Ser Thr Asn Leu Glu Ser Met Asp Thr Ser *

<210> 1261 <211> 123 <212> PRT <213> Homo sapiens

<400> 1261

Met Ile Pro Ala Arg Phe Ala Gly Val Leu Leu Ala Leu Ala Leu Ile 10 Leu Pro Gly Thr Leu Cys Ala Glu Gly Thr Arg Gly Arg Ser Ser Thr 25 20 Ala Arg Cys Ser Leu Phe Gly Ser Asp Phe Val Asn Thr Phe Asp Gly 40 Ser Met Tyr Ser Phe Ala Gly Tyr Cys Ser Tyr Leu Leu Ala Gly Gly 55 60 Cys Gln Lys Arg Ser Phe Ser Ile Ile Gly Asp Phe Gln Asn Gly Lys 70 Arg Val Ser Leu Ser Val Tyr Leu Gly Glu Phe Phe Asp Ile His Leu 85 Phe Val Asn Gly Thr Val Thr Gln Gly Asp Gln Arg Val Ser Met Pro 105 100 Tyr Ala Ser Lys Gly Leu Tyr Leu Glu Thr * 115 . 120 122

<210> 1262 <211> 737 <212> PRT <213> Homo sapiens

<400> 1262 Met Phe Pro Ala Gly Pro Pro Trp Pro Arg Val Arg Val Val Gln Val 10 Leu Trp Ala Leu Leu Ala Val Leu Leu Ala Ser Trp Arg Leu Trp Ala 2.0 25 Ile Lys Asp Phe Gln Glu Cys Thr Trp Gln Val Val Leu Asn Glu Phe 40 Lys Arg Val Gly Glu Ser Gly Val Ser Asp Ser Phe Phe Glu Gln Glu 55 Pro Val Asp Thr Val Ser Ser Leu Phe His Met Leu Val Asp Ser Pro 75 80 Ile Asp Pro Ser Glu Lys Tyr Leu Gly Phe Pro Tyr Tyr Leu Lys Ile 85 Asn Tyr Ser Cys Glu Glu Lys Pró Ser Glu Asp Leu Val Arg Met Gly 100 105 His Leu Thr Gly Leu Lys Pro Leu Val Leu Val Thr Phe Gln Ser Pro 120 125 Val Asn Phe Tyr Arg Trp Lys Ile Glu Gln Leu Gln Ile Gln Met Glu 140 135 Ala Ala Pro Phe Arg Ser Lys Gly Gly Pro Gly Gly Gly Arg Asp 150 155 Arg Asn Leu Ala Gly Met Asn Ile Asn Gly Phe Leu Lys Arg Asp Arg 165 170 175 Asp Asn Asn Ile Gln Phe Thr Val Gly Glu Glu Leu Phe Asn Leu Met 185 190 Pro Gln Tyr Phe Val Gly Val Ser Ser Arg Pro Leu Trp His Thr Val 200 205 Asp Gln Ser Pro Val Leu Ile Leu Gly Gly Ile Pro Asn Glu Lys Tyr 220 215 Val Leu Met Thr Asp Thr Ser Phe Lys Asp Phe Ser Leu Val Glu Val 235 230 Asn Gly Val Gly Gln Met Leu Ser Ile Asp Ser Cys Trp Val Gly Ser 250 245 Phe Tyr Cys Pro His Ser Gly Phe Thr Ala Thr Ile Tyr Asp Thr Ile

			260					265					070		
Ala	Thr	Glu 275	Ser	Thr	Leu	Phe	Ile 280	265 Arg	Gln	Asn	Gln	Leu 285	270 Val	Tyr	Tyr
Phe	Thr 290	_	Thr	Tyr	Thr	Thr 295		Tyr	Glu	Arg	Asn 300		Gly	Ser	Gly
Glu 305	Суз	Ala	Val	Ala	Gly 310	Pro	Thr	Pro	Gly	Glu 315	Gly	Thr	Leu	Val	Asn 320
Pro	Ser	Thr	Glu	Gly 325	Ser	Trp	Ile	Arg	Val 330	Leu	Ala	Ser	Glu	Cys 335	Ile
			Cys 340					345					350		
		355	Thr				360					365			
	370		Thr			375					380				
385			Leu		390					395					400
			Gln	405					410				_	415	
			His 420					425					430		
		435	Ile Ile				440					445			
	450		Leu			455					460				_
465			Pro		470				_	475				-	480
			Val	485					490	-				495	
			500 Ser					505					510	_	
		515	Ile				520					525			
Ser	530 Asn	Glu	Thr	Met	Leu	535 Thr	Leu	Phe	Tvr	Glu	540 Asp	Ser	Lvs	Leu	Tvr
545			Tyr		550				_	555	_		-		560
			Val	565			,		570					575	
			580 Glu					585					590		
		595	Phe				600					605			
	610		Arg			615			_		620				
625					630					635					640
			Leu	645					650					655	
			660 Gly					665					670		
		675	Gly				680					685			
	690 Arg	Arg	Val	His		695 Asn	Gly	Gln	Leu		700 Lys	Asp	Leu	Gln	Pro
705 Arg	Val	Arg	Val		710 Ala	Ala	Gly	Ala		715 Phe	Pro	Gly	Gln		
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<210> 1263 <211> 48 <212> PRT <213> Homo sapiens

<210> 1264 <211> 61 <212> PRT <213> Homo sapiens

<210> 1265 <211> 58 <212> PRT <213> Homo sapiens

<210> 1266 <211> 148

<212> PRT <213> Homo sapiens

<400> 1266 Met Ala Leu Gln Leu Trp Ala Leu Thr Leu Leu Gly Leu Leu Gly Ala 10 5 Gly Ala Ser Leu Arg Pro Arg Lys Leu Asp Phe Phe Arg Ser Glu Lys 20 25 Glu Leu Asn His Leu Ala Val Asp Glu Ala Ser Gly Val Val Tyr Leu 35 40 Gly Ala Val Asn Ala Leu Tyr Gln Leu Asp Ala Lys Leu Gln Leu Glu 55 Gln Gln Val Ala Thr Gly Pro Val Leu Asp Asn Lys Lys Cys Thr Pro 70 75 Pro Ile Glu Ala Ser Gln Cys His Glu Ala Glu Met Thr Asp Asn Val 85 90 Asn Gln Leu Leu Val Asp Pro Pro Arg Lys Arg Leu Val Glu Cys 100 105 Gly Gln Leu Leu Lys Gly Ile Leu Arg Ser Ala Arg Pro Glu Gln His 120 115 125 Leu Pro Pro Pro Val Leu Arg Gly Arg Gln Arg Gly Glu Val Phe Arg 130 135 140 Gly Gln Gln * 145 147

<210> 1267 <211> 227 <212> PRT <213> Homo sapiens

180

<400> 1267 Met Arg Trp Leu Trp Pro Leu Ala Val Ser Leu Ala Val Ile Leu Ala 10 Val Gly Leu Ser Arg Val Ser Gly Gly Ala Pro Leu His Leu Gly Arg 25 His Arg Ala Glu Thr Gln Glu Gln Ser Arg Ser Lys Arg Gly Thr 40 Glu Asp Glu Glu Ala Lys Gly Val Gln Gln Tyr Val Pro Glu Glu Trp 55 Ala Glu Tyr Pro Arg Pro Ile His Pro Ala Gly Leu Gln Pro Thr Lys 75 70 Pro Leu Val Ala Thr Ser Pro Asn Pro Asp Lys Asp Gly Gly Thr Pro 85 90 Asp Ser Gly Gln Glu Leu Arg Gly Asn Leu Thr Gly Ala Pro Gly Gln 105 Arg Leu Gln Ile Gln Asn Pro Leu Tyr Pro Val Thr Glu Ser Ser Tyr 115 120 Ser Ala Tyr Ala Ile Met Leu Leu Ala Leu Val Glu Phe Ala Ala Gly 135 140 Ile Val Gly Asn Leu Ser Val Met Cys Ile Ala Trp His Ser Tyr Tyr 150 155 Leu Lys Ser Ala Trp Asn Ser Ile Leu Ala Ser Leu Ala Leu Trp Asp 165 170 175 Phe Leu Val Leu Phe Phe Cys Leu Pro Ile Val Ile Leu Asn Glu Ile

Thr Lys Gln Arg Leu Leu Gly Asp Ala Pro Cys Pro Cys Arg Ala Leu 200 His Gly Gly Leu Leu Ser Gly Ser His Asp Phe Gln Pro Leu Cys Pro 210 215 Gly His 225 226

<210> 1268 <211> 983 <212> PRT

<213> Homo sapiens

<400> 1268 Met Leu Gly Asn Val Leu Leu Cys Phe Phe Val Phe Phe Ile Phe 5 10 Gly Ile Val Gly Val Gln Leu Trp Ala Gly Leu Leu Arg Asn Arg Cys 25 Phe Leu Pro Glu Asn Phe Ser Leu Pro Leu Ser Val Asp Leu Glu Arg 40 Tyr Tyr Gln Thr Glu Asn Glu Asp Glu Ser Pro Phe Ile Cys Ser Gln 55 Pro Arg Glu Asn Gly Met Arg Ser Cys Arg Ser Val Pro Thr Leu Arg 70 75 Gly Asp Gly Gly Gly Pro Pro Cys Gly Leu Asp Tyr Glu Ala Tyr 85 90 Asn Ser Ser Ser Asn Thr Thr Cys Val Asn Trp Asn Gln Tyr Tyr Thr 100 105 110 Asn Cys Ser Ala Gly Glu His Asn Pro Phe Lys Gly Ala Ile Asn Phe 120 115 1.25 Asp Asn Ile Gly Tyr Ala Trp Ile Ala Ile Phe Gln Val Ile Thr Leu 135 140 Glu Gly Trp Val Asp Ile Met Tyr Phe Val Met Asp Ala His Ser Phe 150 155 Tyr Asn Phe Ile Tyr Phe Ile Leu Leu Ile Ile Val Gly Ser Phe Phe 165 170 Met Ile Asn Leu Cys Leu Val Val Ile Ala Thr Gln Phe Ser Glu Thr 180 185 190 Lys Gln Arg Glu Ser Gln Leu Met Arg Glu Gln Arg Val Arg Phe Leu 195 200 Ser Asn Ala Ser Thr Leu Ala Ser Phe Ser Glu Pro Gly Ser Cys Tyr 210 215 220 Glu Glu Leu Leu Lys Tyr Leu Val Tyr Ile Leu Arg Lys Ala Ala Arg 230 235 Arg Leu Ala Gln Val Ser Arg Ala Ala Gly Val Arg Val Gly Leu Leu 245 250 Ser Ser Pro Ala Pro Leu Gly Gly Gln Glu Thr Gln Pro Ser Ser Ser 265 Cys Ser Arg Ser His Arg Arg Leu Ser Val His His Leu Val His His 280 His His His His His His Tyr His Leu Gly Asn Gly Thr Leu Arg 295 Ala Pro Arg Ala Ser Pro Glu Ile Gln Asp Arg Asp Ala Asn Gly Ser 310 315 Arg Arg Leu Met Leu Pro Pro Pro Ser Thr Pro Ala Leu Ser Gly Ala 325 330 Pro Pro Gly Gly Ala Glu Ser Val His Ser Phe Tyr His Ala Asp Cys

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His	Thr	Ser	Pro	Pro		Glu	Thr	Leu	Lуs		rAs	Ala	Leu	var '	400
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Val	Ala	Ala	Ser	Ser	Gly	Pro	Pro	Thr		Thr	Ser	Leu	ASI	TTE	PIO
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Pro	Gly	Pro	Tyr	Ser	Ser	Met	His		Leu	Leu	Glu	Thr	Gin	ser	Thr
			420					425				_	430	_	
Gly	Ala	Cys	Gln	Ser	Ser	Cys	Lys	Ile	Ser	Ser	Pro	Cys	Leu	ьys	Ата
		435					440					445		_	
Asp	Ser	Gly	Ala	Cys	Gly	Pro	Asp	Ser	Cys	Pro	Tyr	Cys	Ala	Arg	Ата
	450					455					460		_		_
Gly	Ala	Gly	Glu	Val	Glu	Leu	Ala	Asp	Arg	Glu	Met	Pro	Asp	ser	Asp
465					470					475					480
Ser	Glu	Ala	Val	Tyr	Glu	Phe	Thr	Gln	Asp	Ala	Gln	His	Ser	Asp	Leu
				485					490					495	
Arg	Asp	Pro	His	Ser	Arg	Arg	Gln	Arg	Ser	Leu	Gly	Pro	Asp	Ala	GIU
			500					505					510		
Pro	Ser	Ser	Val	Leu	Ala	Phe	Trp	Arg	Leu	Ile	Cys	Asp	Thr	Phe	Arg
		515					520					525			7 7 -
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Leu	Val	Asn	Thr	Leu	Ser	Met	Gly	Ile	Glu	Tyr	His	GIU	Gin	Pro	560
545					550	_		_	_	555	**- 3	Db -	mb se	cor	
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			740)				745	5				750		
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	77	n				77	5				780)			
Lv	s Lv	- s Cv	s Le	u Ala	a Le	ı Va	l Se	r Le	ı Gly	y Glı	ı His	Pro	Glu	Leu	Arg
70	5				79	מ				79	2				800
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Ser Leu Pro Lys Ser Thr Ser Thr Gly Leu Gly Glu Ala Leu Gly Pro 825 Ala Ser Arg Arg Thr Ser Ser Ser Gly Ser Ala Glu Pro Gly Ala Ala 835 840 His Glu Met Lys Ser Pro Pro Ser Ala Arg Ser Ser Pro His Ser Pro 855 Trp Ser Ala Ala Ser Ser Trp Thr Ser Arg Arg Ser Ser Arg Asn Ser 870 875 Leu Gly Arg Ala Pro Ser Leu Lys Arg Arg Ser Pro Ser Gly Glu Arg 885 890 Arg Ser Leu Leu Ser Gly Glu Gly Gln Glu Ser Gln Asp Glu Glu Glu 905 910 Ser Ser Glu Glu Glu Arg Ala Ser Pro Ala Gly Ser Asp His Arg His 920 925 Arg Gly Ser Leu Glu Arg Glu Ala Lys Ser Ser Phe Asp Leu Pro Asp 930 935 Thr Leu Gln Val Pro Gly Leu His Arg Thr Ala Ser Gly Arg Gly Ser 950 955 Ala Ser Glu His Gln Gly Leu Gln Trp Gln Val Gly Phe Arg Ala Pro 970 Gly Pro Gly Pro Ala Ala * 980 982

<210> 1269 <211> 708 <212> PRT <213> Homo sapiens

<400> 1269 Met Leu Ser Leu Arg Arg Cys Thr Ser Met Arg Leu Cys Leu Ser Ser 1 5 10 Ser Leu Ala Ser Pro Cys Ser Thr Met Leu Ser Thr Val Val Leu Tyr 25 Lys Val Cys Asn Ser Phe Val Glu Met Gly Ser Ala Asn Val Gln Ala 40 45 Thr Asp Tyr Leu Lys Gly Val Ala Ser Leu Phe Val Val Ser Leu Gly 55 60 Gly Ala Ala Val Gly Leu Val Phe Ala Phe Leu Leu Ala Leu Thr Thr 70 75 Arg Phe Thr Lys Arg Val Arg Ile Ile Glu Pro Leu Leu Val Phe Leu 85 90 Leu Ala Tyr Ala Ala Tyr Leu Thr Ala Glu Met Ala Ser Leu Ser Ala 105 Ile Leu Ala Val Thr Met Cys Gly Leu Gly Cys Lys Lys Tyr Val Glu 120 125 Ala Asn Ile Ser His Lys Ser Arg Thr Thr Val Lys Tyr Thr Met Lys 135 140 Thr Leu Ala Ser Cys Ala Glu Thr Val Ile Phe Met Leu Leu Gly Ile 150 155 Ser Thr Val Asp Ser Ser Lys Trp Ala Trp Asp Ser Gly Leu Val Leu 165 170 Gly Thr Leu Ile Phe Ile Leu Phe Phe Arg Ala Leu Gly Val Val Leu 180 185 Gln Thr Trp Val Leu Asn Gln Phe Arg Leu Val Pro Leu Asp Lys Ile 195 200 205 Asp Gln Val Val Met Ser Tyr Gly Gly Leu Arg Gly Ala Val Ala Phe

	210					215					220				
מומ		1707	т1.	LON	T.All		λνα	Thr	Larg	1/a 1		בות	T.va	Asp	Tur
225	ьец	vaı	116	neu	230	ASP	Arg	1111.	шуз	235	FIO	Ата	Буз	АЗР	240
	Val	ת 1 ת	Thr	Thr		77-7	Val	V=1	Dha		Thr	บลา	Tle	Val	
FILE	Val	MIA	TIIL	245	116	VAI	Val	VUL	250	FIIC	1111	V		255	0111
Glv	T.e.u	Thr	Tle		Pro	Len	Val	Lvs		Len	Lvs	Val	Tivs	Arg	Ser
GIY	пец	1111	260	цуs	LIO	пси	var	265	ттЪ	шси	Dy 5	val	270	1629	
Glu	иłс	шic		Dro	Thr	T.011	λen		Glu	T.OU	ніс	Glu		Thr	Phe
O.L.u.	1113	275	пур	110	+	Dea	280	0111	01.4	LCu		285			
Aen	uie		T.011	בות	בומ	T a T		Δsn	W= 1	17a l	ദൂഹ		His	Gly	Tvr
App	290	116	пец	ALG	ALG	295		лър	val	Val	300	*****		027	-1-
His		Trn	Δνα	Δsn	Ara			Gln	Phe	Asp		Lvs	Tvr	Leu	Ser
305	- , -	111	n. g		310					315	-,-	,~	-1-		320
	Leu	Leu	Met	Ara		Ser	Ala	Tvr	Ara		Ara	Asp	Gln	Ile	
				325	3			-1-	330		J			335	-
Asp	Val	Tvr	Tvr		Leu	Asn	Ile	Arq		Ala	Ile	Ser	Phe	Val	Asp
		-1-	340					345					350		-
Gl.n	Glv	Glv		Val	Leu	Ser	Ser		Glv	Leu	Thr	Leu	Pro	Ser	Met
	- 4	355					360		•			365			
Pro	Ser		Asn	Ser	Val	Ala	Glu	Thr	Ser	Val	Thr	Asn	Leu	Leu	Arg
	370	J				375					380				
Glu	Ser	Gly	Ser	Gly	Ala	Cys	Leu	Asp	Leu	Gln	Val	Ile	Asp	Thr	Val
385		-		-	390	-		_		395					400
Arg	Ser	Gly	Arg	Asp	Arg	Glu	Asp	Ala	Val	Met	His	His	Leu	Leu	Cys
				405					410					415	
Gly	Gly	Leu	Tyr	Lys	Pro	Arg	Arg	Arg	Tyr	Lys	Ala	Ser	Суѕ	Ser	Arg
		'	420					425					430		
His	Phe	Ile	Ser	Glu	Asp	Ala	Gľn	Glu	Arg	Gln	Asp	Lys	Glu	Val	Phe
		435					440					445			
Gln	Gln	Asn	Met	Lys	Arg		Leu	Glu	Ser	Phe		Ser	Thr	Lys	His
	450					455		_	_	_	460	_	1	~7	_
	Ile	Cys	Phe	Thr		Ser	ГÀЗ	Pro	Arg		Arg	гла	Thr	Gly	
465	_	_	_		470				~1	475	m1	3	~1	T	480
Arg	ГÄа	Lys	Asp		Val	Ата	Asn	АТА		Ата	Thr	Asn	GIY	Lys	HIS
	~7		~ 1	485	~1		m1	*1-	490	17-1	T1.	T 033	Th w	495	Cl.,
Arg	GIA	ьeu		Pne	GIN	Asp	THE		Ата	vai	TTE	пеп	510	Val	Giu
Cor	<i>a</i> 1	~?	500	C7.11	Gl.	~7.11	Car	505	cor	Cor	Glu	Thr		Lys	Glu
261	Gru	515	Giu	GIU	Giu	GIU	520	Asp	261	707	GIU	525	Giu	шуы	014
Δen	Nen		G] v	Tla	Tle	Dhe		Δla	Δτα	Δla	Thr		Glu	Val	Leu
лар	530	GLu	GLY	116	110	535	V (4.1.	,,u	9	7114	540	001	-		
Gln		Glv	Lvs	Val	Ser		Ser	Leu	Glu	Val		Pro	Ser	Pro	Arg
545		O-1	-1-		550					555	-1-				560
	Ile	Pro	Pro	Ser		Thr	Cys	Ala	Glu	Lys	Glu	Leu	Pro	Trp	Lys
				565			-		570	•				57 5	_
Ser	Gly	Gln	Gly		Leu	Ala	Val	Tyr	Val	Ser	Ser	Glu	Thr	Thr	Lys
	-		580	-				585					590		
Ile	Val	Pro	Val	Asp	Met	Gln	Thr	Gly	Trp	Asn	Gln	Ser	Ile	Ser	Ser
		595		-			600	_	-			605			
Leu	Glu	Ser	Leu	Ala	Ser	Pro	Pro	Cys	Asn	Gln	Ala	Pro	Ile	Leu	Thr
	610					615					620				
Cys	Leu	Pro	Pro	His	Pro	Arg	Gly	Thr	Glu	Glu	Pro	Gln	Val	Pro	Leu
625					630					635					640
His	Leu	Pro	Ser	Asp	Pro	Arg	Ser	Ser		Ala	Phe	Pro	Pro	Ser	Leu
				645					650				_	655	
Ala	Lys	Ala		Arg	Ser	Arg	Ser		Ser	Ser	Ala	Asp		Pro	Gln
			660		_	_		665		_	_		670	***	T
Gln	Gln		Leu	Gln	Pro	Leu		Gly	His	гЛа	Asp		Thr	His	ьеи
		675					680					685			

<210> 1270 <211> 93 <212> PRT <213> Homo sapiens

<400> 1270 Met Leu Gln Ala Ala Leu Trp Cys Gly Ile Gly Leu Tyr Leu Val Thr 10 Leu Arg Leu Gly Val Glu Val Thr Pro Glu Ser Gln His Phe Gly Arg 25 Pro Arg Arg Ala Asp His Leu Arg Pro Gly Gly Arg Gly Gln Ser Gly 40 35 Gln His Gly Glu Thr Pro Ser Leu Leu Glu Ile Gln Lys Ile Ser Trp 60 55 Met Trp Trp His Ile Pro Val Ile Pro Ala Thr Trp Glu Ala Glu Ala 75 70 Gly Glu Ser Leu Glu Arg Gly Arg Trp Arg Leu Gln 90 92 85

<210> 1271 <211> 648 <212> PRT <213> Homo sapiens

<400> 1271 Met Leu Trp Val Thr Gly Pro Val Leu Ala Val Ile Leu Ile Ile Leu 10 5 Ile Val Ile Ala Ile Leu Leu Phe Lys Arg Lys Arg Thr His Ser Pro 25 20 Ser Ser Lys Asp Glu Gln Ser Ile Gly Leu Lys Asp Ser Leu Leu Ala 40 His Ser Ser Asp Pro Val Glu Met Arg Arg Leu Asn Tyr Gln Thr Pro 55 60 Gly Met Arg Asp His Pro Pro Ile Pro Ile Thr Asp Leu Ala Asp Asn 70 75 Ile Glu Arg Leu Lys Ala Asn Asp Gly Leu Lys Phe Ser Gln Glu Tyr 85 Glu Ser Ile Asp Pro Gly Gln Gln Phe Thr Trp Glu Asn Ser Asn Leu 105 100 Glu Val Asn Lys Pro Lys Asn Arg Tyr Ala Asn Val Ile Ala Tyr Asp 125 120 His Ser Arg Val Ile Leu Thr Ser Ile Asp Gly Val Pro Gly Ser Asp 140 Tyr Ile Asn Ala Asn Tyr Ile Asp Gly Tyr Arg Lys Gln Asn Ala Tyr 155 150 Ile Ala Thr Gln Gly Pro Leu Pro Glu Thr Met Gly Asp Phe Trp Arg 170 175 165 Met Val Trp Glu Gln Arg Thr Ala Thr Val Val Met Met Thr Arg Leu

			180					185					190		
Glu	Glu	Lys 195	Ser	Arg	Val	Lys	Суs 200		Gln	Tyr	Trp	Pro 205		Arg	Gly
Thr	Glu 210	Thr	Cys	Gly	Leu	Ile 215	Gln	Val	Thr	Leu	Leu 220		Thr	Val	Glu
Leu 225	Ala	Thr	Tyr	Thr	Val 230	Arg	Thr	Phe	Ala	Leu 235	His	Lys	Ser	Ġly	Ser 240
Ser	Glu	Lys	Arg	Glu 245	Leu	Arg	Gln	Phe	Gln 250	Phe	Met	Ala	Trp	Pro 255	Asp
			Pro 260					265					270		
Val	Lys	Ala 275	Cys	Asn	Pro	Leu	Asp 280	Ala	Gly	Pro	Met	Val 285	Val	His	Cys
	290		Val	_		295	-	-			300		_		
305			Met		310					315					320
			Arg	325		_		_	330					335	
			Ile 340					345					350	_	
		355	Pro				360					365			
	370		Pro	_		375					380				•
385			Ser		390					395					400
			Asn	405		_		_	410					415	-
			Arg 420		_			425		_	_		430	_	
		435	Asn Thr				440					445		_	
	450		Trp			455					460				
465			Met		470					475					480
			Arg	485				_	490		-	_		495	
			500 Gln	-		_		505		_			510		-
		515	Ser	_			520			-		525	_		_
	530		Val			535	_				540		_	_	
545			Lys		550		_		_	555		_			560
			Ser	565					570		-	-		575	
			580 Leu					585					590		
		595					600					605			
	610	_	Lys			615			_		620				
625			Tyr		630		tyr *	Arg	ATG	635	ьеи	GLU	ıyr	теп	640
ner	FILE	vaħ	His	6 4 5	MIG	647	٦								

<210> 1272 <211> 109 <212> PRT <213> Homo sapiens

<400> 1272 Met Lys Ala Leu Cys Leu Leu Leu Leu Pro Val Leu Gly Leu Leu Val 10 Ser Ser Lys Thr Leu Cys Ser Met Glu Glu Ala Ile Asn Glu Arg Ile 25 Gln Glu Val Ala Gly Ser Leu Ile Phe Arg Ala Ile Ser Ser Ile Gly 40 Leu Glu Cys Gln Ser Val Thr Ser Arg Gly Asp Leu Ala Thr Cys Pro 55 Arg Gly Phe Ala Val Thr Gly Cys Thr Cys Gly Ser Ala Cys Gly Ser 70 Trp Asp Val Arg Ala Glu Thr Thr Cys His Cys Gln Cys Ala Gly Met 85 90 Asp Trp Thr Gly Ala Arg Cys Cys Arg Val Gln Pro * 100

<210> 1273 <211> 56 <212> PRT

<213> Homo sapiens

Phe His Ile Asp Thr Asn His

<210> 1274 <211> 188 <212> PRT <213> Homo sapiens

55 Lys Lys Glu Gly Ser Asp Arg Gln Trp Asn Tyr Ala Cys Met Pro Thr 65 70 75 Pro Gln Ser Leu Gly Glu Pro Thr Glu Cys Trp Trp Glu Glu Ile Asn 90 Arg Ala Gly Met Glu Trp Tyr Gln Thr Cys Ser Asn Asn Gly Leu Val 100 105 110 Ala Gly Phe Gln Ser Arg Tyr Phe Glu Ser Val Leu Asp Arg Glu Trp 115 120 125 Gln Phe Tyr Cys Cys Arg Tyr Ser Lys Arg Cys Pro Tyr Ser Cys Trp 135 140 Leu Thr Thr Glu Tyr Pro Gly His Tyr Gly Glu Glu Met Asp Met Ile 150 155 Ser Tyr Asn Tyr Asp Tyr Tyr Ile Arg Gly Ala Thr Thr His Phe Leu 165 170 175 Cys Ser Gly Lys Gly Ser Pro Ser Gly Ser Ser * 180

<210> 1275 <211> 81 <212> PRT <213> Homo sapiens

<210> 1276 <211> 46 <212> PRT <213> Homo sapiens

<210> 1277

<211> 431 <212> PRT <213> Homo sapiens

<400> 1277 Met Ala Leu Leu Val Pro Leu Ala Leu Leu Val Ile Gln Ala His Leu 1.0 Val Leu Ser Val Gln Leu Glu Arg Val Val Thr Glu Glu Lys Val Ala Leu Leu Ala Leu Leu Val Leu Pro Val Leu Leu Val Pro Glu Val Leu Leu Val Leu Lys Ala His Val Val Thr Lys Val Lys Gln Val Asn Val Glu Leu Leu Ala Ser Lys Asp Ile Glu Asp Ser Leu Val Ile Gln Val Pro Gln Val Leu Gln Ala Leu Leu Val Ser Arg Val Gln Ser Ala Val 85. Gln Asp Leu Gln Ala Pro Glu Asp Leu Leu Asp Pro Val Asp Leu Leu Ala Lys Met Glu Pro Val Asp Ile Gln Val Pro Leu Asp His Gln Gly Leu Glu Val Thr Glu Val Lys Glu Asp Leu Arg Ala Pro Gln Ala Thr Gln Gly Asn Gln Ala Leu Leu Asp Leu Leu Val Pro Leu Val Leu Ala Val Val Val Leu Glu Pro Leu Pro Leu Leu Gly Leu Glu Val Lys Lys Leu Ala Gly Phe Ala Pro Tyr Tyr Gly Asp Glu Pro Met Asp Phe Lys Ile Asn Thr Asp Glu Ile Met Thr Ser Leu Lys Ser Val Asn Gly Gln Ile Glu Ser Leu Ile Ser Pro Asp Gly Ser Arg Lys Asn Pro Ala Arg Asn Cys Arg Asp Leu Lys Phe Cys His Pro Glu Leu Lys Ser Gly Glu Tyr Trp Val Asp Pro Asn Gln Gly Cys Lys Leu Asp Ala Ile Lys Val Phe Cys Asn Met Glu Thr Gly Glú Thr Cys Ile Ser Ala Asn Pro Leu Asn Val Pro Arg Lys His Trp Trp Thr Asp Ser Ser Ala Glu Lys Lys His Val Trp Phe Gly Glu Ser Met Asp Gly Gly Phe Gln Phe Ser Tyr Gly Asn Pro Glu Leu Pro Glu Asp Val Leu Asp Val Gln Leu Ala Phe Leu Arg Leu Leu Ser Ser Arg Ala Ser Gln Asn Ile Thr Tyr His Cys Lys Asn Ser Ile Ala Tyr Met Asp Gln Ala Ser Gly Asn Val Lys Lys Ala Leu Lys Leu Met Gly Ser Asn Glu Gly Glu Phe Lys Ala Glu Gly Asn Ser Lys Phe Thr Tyr Thr Val Leu Glu Asp Gly Cys Thr Lys His Thr Gly Glu Trp Ser Lys Thr Val Phe Glu Tyr Arg Thr Arg Lys Ala Val Arg Leu Pro Ile Val Asp Ile Ala Pro Tyr Asp Ile Gly Gly Pro Asp Gln Glu Phe Gly Val Asp Val Gly Pro Val Cys Phe Leu *

420 425 430

<210> 1278 <211> 53 <212> PRT <213> Homo sapiens

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<210> 1279 <211> 73 <212> PRT <213> Homo sapiens

<210> 1280 <211> 51 <212> PRT <213> Homo sapiens

<210> 1281 <211> 144 <212> PRT <213> Homo sapiens

<400> 1281 Met Lys Ser Gly Ser Gly Gly Ser Pro Thr Ser Leu Trp Gly Leu 10 Leu Phe Leu Ser Ala Ala Leu Ser Leu Trp Pro Thr Ser Gly Glu Ile 30 25 Cys Gly Pro Gly Ile Asp Ile Arg Asn Asp Tyr Gln Gln Leu Lys Arg 40 35 Leu Glu Asn Cys Thr Val Ile Glu Gly Tyr Leu His Ile Leu Leu Ile 60 Ser Lys Ala Glu Asp Tyr Arg Ser Tyr Arg Phe Pro Lys Leu Thr Val 70 75 Ile Thr Glu Tyr Leu Leu Phe Arg Val Ala Gly Leu Glu Ser Leu 85 90 Gly Asp Leu Phe Pro Asn Leu Thr Val Ile Arg Gly Trp Lys Leu Phe 110 100 105 Tyr Asn Tyr Ala Leu Val Ile Phe Glu Met Thr Asn Leu Lys Asp Ile 115 120 125 Gly Leu Tyr Asn Leu Arg Asn Ile Thr Arg Gly Gly His Gln Asp * 140 135

<210> 1282 <211> 267 <212> PRT <213> Homo sapiens

<400> 1282 Met Gly Pro Pro Ser Ala Cys Pro His Arg Glu Cys Ile Pro Trp Gln Gly Leu Leu Thr Ala Ser Leu Leu Thr Phe Trp Asn Ala Pro Thr 2.5 Thr Ala Trp Leu Phe Ile Ala Ser Ala Pro Phe Glu Val Ala Glu Gly 40 35 Glu Asn Val His Leu Ser Val Val Tyr Leu Pro Glu Asn Leu Tyr Ser 55 60 Tyr Gly Trp Tyr Lys Gly Lys Thr Val Glu Pro Asn Gln Leu Ile Ala 75 70 Ala Tyr Val Ile Asp Asp Thr His Val Arg Thr Pro Gly Pro Ala Tyr . 90 95 Ser Gly Arg Glu Thr Ile Ser Pro Ser Gly Asp Leu His Phe Gln Asn 100 105 Val Thr Leu Glu Asp Thr Gly Tyr Tyr Asn Leu Gln Val Thr Tyr Arg 120 125 Asn Ser Gln Ile Glu Gln Ala Ser His His Leu Arg Val Tyr Gln Val 140 135 Ser Gly Leu Thr Pro Pro Ser Lys Pro Ala Ala Pro Gln Ser Pro Arg 155 150 Arg Ala Pro Gly Val Leu Thr Cys His Thr Asn Asn Thr Gly Thr Ser 170 165 Phe Gln Trp Ile Phe Asn Asn Gln Arg Leu Gln Val Thr Lys Arg Met

180 185 Lys Leu Ser Trp Phe Asn His Met Leu Thr Ile Asp Pro Ile Arg Gln 200 205 Glu Asp Ala Gly Glu Tyr Gln Cys Glu Val Ser Asn Pro Val Ser Ser 215 220 Asn Arg Ser Asp Pro Leu Lys Leu Thr Val Lys Ser Asp Asp Asn Thr 230 235 Leu Gly Ile Leu Ile Gly Val Leu Val Gly Ser Leu Leu Val Ala Ala 245 250 Leu Val Cys Phe Leu Leu Leu Arg Lys Thr Gly 260 265

<210> 1283 <211> 262 <212> PRT <213> Homo sapiens

<400> 1283

 Met Leu Val Leu Leu Val Leu Arg Val Ser Leu Ala Ala Leu Val Lys

 1
 5
 10
 15

 Met Glu Leu Leu Val Arg Trp Ala Pro Val Ala Cys Leu Val Arg Glu
 20
 25
 30

 Val Ala Leu Glu Pro Leu Ala Leu Leu Val Leu Val Glu Met Met Val
 35
 40
 45

 Leu Leu Val Leu Val Leu Val Pro Pro Ala Pro Leu Val Leu
 41
 42

Pro Leu Ala Leu Leu Val Leu Leu Ala Leu Glu Thr Leu Val Leu
100 105 110

Arg Glu Ser Leu Val Leu Lys Val Pro Met Val Leu Leu Val Leu Leu 115 120 125

Val Leu Leu Ala Ser Leu Val Pro Glu Ala Pro Leu Asp Pro Arg Ala 130 135 140 Pro Ala Ala Leu Leu Val Pro Arg Val Thr Ala Val Asn Leu Val Leu

145 150 155 160
Leu Ala Ala Lys Glu Thr Leu Val Leu Arg Glu Ser Leu Ala Leu Leu

Val Phe Lys Asp Pro Leu Ala Leu Leu Glu Arg Lys Glu Ser Glu Glu
180 185 190

Leu Glu Val Asn Pro Asp Pro Leu Ala Cys Pro Asp Pro Leu Ala Ser 195 200 205

Val Val Asp Leu Val Ala Val Val Ser Leu Ala Gln Met Val Leu Leu
210 215 220

Val Pro Arg Val Pro Leu Val Asn Val Val Leu Leu Ala Leu Leu Ala 225 230 235 240 Pro Lys Asp Leu Leu Val Lys Leu Val Val Pro Val Lys Leu Val Cys

245 250 Leu Val Pro Arg Val * 260 261

<210> 1284

<211> 50 <212> PRT <213> Homo sapiens

<210> 1285 <211> 323 <212> PRT <213> Homo sapiens

<400> 1285 Met Leu Val Met Ala Pro Arg Thr Val Leu Leu Leu Ser Ala Ala 10 Leu Ala Leu Thr Glu Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe 25 20 Tyr Thr Ser Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ser 40 35 Val Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala 60 55 Ala Ser Pro Arg Glu Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly 75 70 Pro Glu Tyr Trp Asp Arg Asn Thr Gln Ile Tyr Lys Ala Gln Ala Gln 90 Thr Asp Arg Glu Ser Leu Arg Asn Leu Arg Gly Tyr Tyr Asn Gln Ser 110 100 105 Glu Ala Gly Ser His Thr Leu Gln Ser Met Tyr Gly Cys Asp Val Gly 125 115 120 Pro Asp Gly Arg Leu Leu Arg Gly His Asp Gln Tyr Ala Tyr Asp Gly 130 135 Lys Asp Tyr Ile Ala Leu Asn Glu Asp Leu Arg Ser Trp Thr Ala Ala 150 155 Asp Thr Ala Ala Gln Ile Thr Gln Arg Lys Trp Glu Ala Ala Arg Glu 175 165 170 Ala Glu Gln Arg Arg Ala Tyr Leu Glu Gly Glu Cys Val Glu Trp Leu 185 190 180 Arg Arg Tyr Leu Glu Asn Gly Lys Asp Lys Leu Glu Arg Ala Asp Pro 205 195 200 Pro Lys Thr His Val Thr His His Pro Ile Ser Asp His Glu Ala Thr 215 220 Leu Arg Cys Trp Ala Leu Gly Phe Tyr Pro Ala Glu Ile Thr Leu Thr 235 230 Trp Gln Arg Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu .250 255 245 Thr Arg Pro Ala Gly Asp Arg Thr Phe Gln Lys Val Gly Gln Leu Trp 265 260 Val Val Pro Ser Gly Glu Glu Gln Arg Tyr Thr Cys His Val Gln His

<210> 1286 <211> 306 <212> PRT <213> Homo sapiens

<400> 1286 Met Leu Leu Phe Leu Leu Ser Ala Leu Val Leu Leu Thr Gln Pro Leu 5 10 Gly Tyr Leu Glu Ala Glu Met Lys Thr Tyr Ser His Arg Thr Met Pro 20 25 Ser Ala Cys Thr Leu Val Met Cys Ser Ser Val Glu Ser Gly Leu Pro 3.5 40 Gly Arg Asp Gly Arg Asp Gly Arg Glu Gly Pro Arg Gly Glu Lys Gly 60 Asp Pro Gly Leu Pro Gly Ala Ala Gly Gln Ala Gly Met Pro Gly Gln 65 75 70 Ala Gly Pro Val Gly Pro Lys Gly Asp Asn Gly Ser Val Gly Glu Pro 85 90 95 Gly Pro Lys Gly Asp Thr Gly Pro Ser Gly Pro Pro Gly Pro Pro Gly 105 Val Pro Gly Pro Ala Gly Arg Glu Gly Pro Leu Gly Lys Gln Gly Asn 115 120 125 Ile Gly Pro Gln Gly Lys Pro Gly Pro Lys Gly Glu Ala Gly Pro Lys 130 135 140 Gly Glu Val Gly Ala Pro Gly Met Gln Gly Ser Ala Gly Ala Arg Gly 150 155 Leu Ala Gly Pro Lys Gly Glu Arg Gly Val Pro Gly Glu Arg Gly Val 165 170 175 Pro Gly Asn Thr Gly Ala Ala Gly Ser Ala Gly Ala Met Gly Pro Gln 180 185 Gly Ser Pro Gly Ala Arg Gly Pro Pro Gly Leu Lys Gly Asp Lys Gly 195 200 205 Ile Pro Gly Asp Lys Gly Ala Lys Gly Glu Ser Gly Leu Pro Asp Val 215 220 Ala Ser Leu Arg Gln Gln Val Glu Ala Leu Gln Gly Gln Val Gln His 230 235 Leu Gln Ala Ala Phe Ser Gln Tyr Lys Lys Val Glu Leu Phe Pro Asn 245 250 255Gly Gln Ser Val Gly Glu Lys Ile Phe Lys Thr Ala Gly Phe Val Lys 265 Pro Phe Thr Glu Ala Gln Leu Leu Cys Thr Gln Ala Gly Gln Leu 280 285 Ala Ser Pro Arg Ser Ala Ala Glu Asn Ala Pro Leu Ala Thr Ala Gly 295 305

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<210> 1287
<211> 299
<212> PRT
<213> Homo sapiens
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<400> 1287 Met Gly Arg Trp Ala Leu Asp Val Ala Phe Leu Trp Lys Ala Val Leu 10 Thr Leu Gly Leu Val Leu Leu Tyr Tyr Cys Phe Ser Ile Gly Ile Thr 20 25 30 Phe Tyr Asn Lys Trp Leu Thr Lys Ser Phe His Phe Pro Leu Phe Met 40 Thr Met Leu His Leu Ala Val Ile Phe Leu Phe Ser Ala Leu Ser Arg 55 60 Ala Leu Val Gln Cys Ser Ser His Arg Ala Arg Val Val Leu Ser Trp 70 7.5 Ala Asp Tyr Leu Arg Arg Val Ala Pro Thr Ala Leu Ala Thr Ala Leu 85 90 Asp Val Gly Leu Ser Asn Trp Ser Phe Leu Tyr Val Thr Val Ser Leu 100 105 Tyr Thr Met Thr Lys Ser Ser Ala Val Leu Phe Ile Leu Ile Phe Ser 120 Leu Ile Phe Lys Leu Glu Glu Leu Arg Ala Ala Leu Val Leu Val Val 135 140 Leu Leu Ile Ala Gly Gly Leu Phe Met Phe Thr Tyr Lys Ser Thr Gln 150 155 Phe Asn Val Glu Gly Phe Ala Leu Val Leu Gly Ala Ser Phe Ile Gly 170 175 165 Gly Ile Arg Trp Thr Leu Thr Gln Met Leu Leu Gln Lys Ala Glu Leu 185 190 180 Gly Leu Gln Asn Pro Ile Asp Thr Met Phe His Leu Gln Pro Leu Met 200 Phe Leu Gly Leu Phe Pro Leu Phe Ala Val Phe Glu Gly Leu His Leu 215 220 Ser Thr Ser Glu Lys Ile Phe Arg Phe Gln Gly His Arg Ala Ala Pro 230 235 240 Ala Gly Thr Trp Gly Ala Ser Ser Leu Ala Gly Phe Ser Pro Leu Val 245 250 Trp Ala Ser Leu Ser Ser Ser Trp Ser Pro Glu Pro Pro Ala Ser Leu 260 265 270 Ser Pro Leu Pro Ala Phe Leu Arg Lys Ser Ala Leu Cys Cys Trp Gln 275 280 Leu Ile Cys Trp Ala Ile Arg Ser Ala Ser *

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<210> 1288
<211> 161
<212> PRT
<213> Homo sapiens
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29Ò

298

Ala Leu Arg Val Trp Gly Val Gly Asn Glu Ala Gly Val Gly Pro Gly 40 Leu Gly Glu Trp Ala Val Val Thr Gly Ser Thr Asp Gly Ile Gly Lys 55 Ser Tyr Ala Glu Glu Leu Ala Lys His Gly Met Lys Val Val Leu Ile Ser Arg Ser Lys Asp Lys Leu Asp Gln Val Ser Ser Glu Ile Lys Glu 85 90 Lys Phe Lys Val Glu Thr Arg Thr Ile Ala Val Asp Phe Ala Ser Glu 105 Asp Ile Tyr Asp Lys Ile Lys Thr Gly Leu Ala Gly Leu Glu Ile Gly 115 120 Ile Leu Val Asn Asn Val Gly Met Ser Tyr Glu Tyr Pro Glu Tyr Phe 135 140 Leu Asp Val Pro Asp Leu Asp Asn Val Ile Lys Lys Asn Asp Lys Tyr 150

<210> 1289 <211> 46 <212> PRT <213> Homo sapiens

<210> 1290 <211> 453 <212> PRT <213> Homo sapiens

<400> 1290 Met Thr Ser Lys Phe Ile Leu Val Ser Phe Ile Leu Ala Ala Leu Ser 1 5 10 Leu Ser Thr Thr Phe Ser Leu Gln Pro Asp Gln Gln Lys Val Leu Leu 25 Val Ser Phe Asp Gly Phe Arg Trp Asp Tyr Leu Tyr Lys Val Pro Thr 3.5 40 45 Pro His Phe His Tyr Ile Met Lys Tyr Gly Val His Val Lys Gln Val 55 60 Thr Asn Val Phe Ile Thr Lys Thr Tyr Pro Asn His Tyr Thr Leu Val 70 75 Thr Gly Leu Phe Ala Glu Asn His Gly Ile Val Ala Asn Asp Met Phe 85 90 Asp Pro Ile Arg Asn Lys Ser Phe Ser Leu Asp His Met Asn Ile Tyr 100 105

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Asp Ser Lys Phe Trp Glu Glu Ala Thr Pro Ile Trp Ile Thr Asn Gln
                       120
      115
Arg Ala Gly His Thr Ser Gly Ala Ala Met Trp Pro Gly Thr Asp Val
                                      140
                    135
Lys Ile His Lys Arg Phe Pro Thr His Tyr Met Pro Tyr Asn Glu Ser
                 150
                                  155
Val Ser Phe Glu Asp Arg Val Ala Lys Ile Ile Glu Trp Phe Thr Ser
                               170
             165
Lys Glu Pro Ile Asn Leu Gly Leu Leu Tyr Trp Glu Asp Pro Asp Asp
                  185
                                             190
         180
Met Gly His His Leu Gly Pro Asp Ser Pro Leu Met Gly Pro Val Ile
                             205
                     200
Ser Asp Ile Asp Lys Lys Leu Gly Tyr Leu Ile Gln Met Leu Lys Lys
                    215
                                       220
Ala Lys Leu Trp Asn Thr Leu Asn Leu Ile Ile Thr Ser Asp His Gly
                                   235
          230
Met Thr Gln Cys Ser Glu Glu Arg Leu Ile Glu Leu Asp Gln Tyr Leu
                      250
              245
Asp Lys Asp His Tyr Thr Leu Ile Asp Gln Ser Pro Val Ala Ala Ile
                  265
         260
Leu Pro Lys Glu Gly Lys Phe Asp Glu Val Tyr Glu Ala Leu Thr His
                         280
    275
Ala His Pro Asn Leu Thr Val Tyr Lys Lys Glu Asp Val Pro Glu Arg
                                      300
   290 295
Trp His Tyr Lys Tyr Asn Ser Arg Ile Gln Pro Ile Ile Ala Val Ala
                                   315
                 310
Asp Glu Gly Trp His Ile Leu Gln Asn Lys Ser Asp Asp Phe Leu Leu
                       330
              325
Gly Asn His Gly Tyr His Asn Ala Leu Ala Asp Met His Pro Ile Phe
          340
                    345
Leu Ala His Gly Pro Ala Phe Arg Lys Asn Phe Ser Lys Glu Ala Met
                                 365
                360
    355
Asn Ser Thr Asp Leu Tyr Pro Leu Leu Cys His Leu Leu Asn Ile Thr
                                       380
                    375
Ala Met Pro His Asn Gly Ser Phe Trp Asn Val Gln Asp Leu Leu Asn
                 390
                                    395
Ser Ala Met Pro Arg Val Val Pro Tyr Thr Gln Ser Thr Ile Leu Leu
                              410
              405
Pro Gly Ser Val Lys Pro Ala Glu Tyr Asp Gln Glu Gly Ser Tyr Pro
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Tyr Phe Ile Gly Val Ser Leu Gly Ser Ile Ile Val Ile Val Phe Phe
      435
Cys Asn Phe His *
    450 452
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<210> 1291
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<400> 1291
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<211> 78

<212> PRT

<213> Homo sapiens

<221> misc_feature

<222> (1)...(78)

<223> Xaa = any amino acid or nothing

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Cys Thr Val Phe Ala Asn Asp Leu Asn Pro Glu Ser His Lys Trp Leu 325 330 335 Leu Tyr Asn Cys Lys Leu Asn Lys Val Asp Gln Lys Val Lys Val Phe 345 340 Asn Leu Asp Gly Lys Asp Phe Leu Gln Gly Pro Val Lys Glu Glu Leu 365 360 355 Met Gln Leu Leu Gly Leu Ser Lys Glu Arg Lys Pro Ser Val His Val 375 380 Val Met Asn Leu Pro Ala Lys Ala Ile Glu Phe Leu Ser Ala Phe Lys 395 390 Trp Leu Leu Asp Gly Gln Pro Met Pro Ala Val Ser Ser Phe Pro * 415 410 405

<210> 1293 <211> 113 <212> PRT <213> Homo sapiens

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<210> 1294 <211> 57 <212> PRT <213> Homo sapiens

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Val Phe Ile 65 67

> <210> 1296 <211> 66 <212> PRT

<213> Homo sapiens

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<210> 1297 <211> 57 <212> PRT <213> Homo sapiens

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<211> 235 <212> PRT <213> Homo sapiens

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<210> 1299 <211> 64 <212> PRT <213> Homo sapiens

<210> 1300 <211> 80

<212> PRT <213> Homo sapiens

<210> 1301 <211> 87 <212> PRT <213> Homo sapiens

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Val Pro Gln Ala Gly Gly Gln His Ala Arg Gly Gln His Ala Met Gln
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Phe Pro Ala Glu Leu Thr Arg Asp Ala Cys Lys Thr Arg Pro Arg Glu
115 120 125

Leu Arg Leu Ile Cys Ile Tyr Phe Ser Asn Thr His Phe Phe Lys
130 143

<210> 1303 <211> 60 <212> PRT <213> Homo sapiens

<210> 1304 <211> 56 <212> PRT <213> Homo sapiens

<210> 1305 <211> 63 <212> PRT <213> Homo sapiens

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<210> 1306 <211> 138 <212> PRT <213> Homo sapiens

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<210> 1307 <211> 64 <212> PRT <213> Homo sapiens

<210> 1308 <211> 65 <212> PRT <213> Homo sapiens

<400> 1308

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20 25 30 Gly Pro Leu Thr Gln Tyr Leu Met Asp His His His Thr Leu Leu Cys 40 4.5 Asn Gly Tyr Trp Leu Ala Trp Leu Ile His Val Gly Glu Ser Leu His **5**5 60 Ala Ile Leu Leu Gly Glu Arg Lys Gly Ile Thr Ser Gly Arg Ser Gln 70 75 Leu Leu Trp Leu Leu Gln Thr Leu Phe Phe Gly Ile Thr Thr Leu Thr 85 Ile Phe Asp Ala Tyr Lys Arg Lys Arg 100

<210> 1312 <211> 114 <212> PRT <213> Homo sapiens

<400> 1312 Met Lys Gly Lys Trp Cys Cys Ser Leu Leu Cys Gln Ser Pro Gln Val 10 Gln Thr Ala Leu Val Cys Pro Leu Ser Leu Ser Leu Gly Pro Pro Gly 20 Pro Gln Cys Pro Leu Leu Trp Leu Gly Gln Glu Asp Leu Pro Asp Ile Ala Arg Cys Ile Thr Asp Asp Cys Ser Gln Leu Pro Gln Ala Pro Ala 55 60 Ser Leu Ala Ser Cys Phe Phe Pro Gln Ser Cys Leu Leu Ile Ser Ile 65 70 75 80 His Leu Ser Met Gly Tyr Ser Trp Thr Leu Gly Leu Gly Val Gly Ile 85 90 Arg Leu Leu Pro Thr Lys Gly Val Lys Val Thr His Phe Pro Tyr His 105 Ala * 113

<210> 1313 <211> 88 <212> PRT <213> Homo sapiens

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<210> 1314 <211> 65 <212> PRT <213> Homo sapiens

<210> 1315 <211> 71 <212> PRT <213> Homo sapiens

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<210> 1317 <211> 91 <212> PRT <213> Homo sapiens

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<210> 1318 <211> 65 <212> PRT <213> Homo sapiens

<210> 1319 <211> 46 <212> PRT <213> Homo sapiens

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<210> 1321 <211> 55 <212> PRT <213> Homo sapiens

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<210> 1323 <211> 85 <212> PRT <213> Homo sapiens

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 Leu
 Thr
 Gly
 Arg
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 Thr
 Asn
 Ser
 Phe
 Val

 Asn
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 Pro
 Gly
 Gln
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 Gly
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<210> 1324 <211> 46 <212> PRT <213> Homo sapiens

<210> 1325 <211> 87 <212> PRT <213> Homo sapiens

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<210> 1326 <211> 69 · <212> PRT <213> Homo sapiens

<400> 1326 Met Ser Leu Phe Leu Phe Phe Leu Met Phe Gln Val Leu Ser Glu Val ı 5 10 Ser Trp Gly Gly Val Gly Ser Val Ser Asn Gln Gly Leu Glu His His 20 25 Glu Ile Val Thr Pro Asp Leu Gln Ser Leu Ala Gly Gly Trp Thr Gly 35 40 45 Gly Arg Glu Arg Gly Phe Leu Phe Thr Phe Asn Ile Phe Leu Gln Lys 50 55 60 Lys Gln Thr Ile * 65 68

<210> 1327 <211> 103 <212> PRT <213> Homo sapiens <221> misc_feature

<222> (1)...(103) <223> Xaa = any amino acid or nothing

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<210> 1328 <211> 52 <212> PRT <213> Homo sapiens

<210> 1329 <211> 204 <212> PRT <213> Homo sapiens

<400> 1329 Met Cys Thr Arg Asn Leu Ala Leu Leu Phe Ala Pro Ser Val Phe Gln 5 10 Thr Asp Gly Arg Gly Glu His Glu Val Arg Val Leu Gln Glu Leu Ile 20 25 Asp Gly Tyr Ile Ser Val Phe Asp Ile Asp Ser Asp Gln Val Ala Gln 40 Ile Asp Leu Glu Val Ser Leu Ile Thr Thr Trp Lys Asp Val Gln Leu 55 60 Ser Gln Ala Gly Asp Leu Ile Met Glu Val Tyr Ile Glu Gln Gln Leu 70 75 Pro Asp Asn Cys Val Thr Leu Lys Val Ser Pro Thr Leu Thr Ala Glu 90

Glu Leu Thr Asn Gln Val Leu Glu Met Arg Gly Thr Ala Ala Gly Met 100 105 Asp Leu Trp Val Thr Phe Glu Ile Arg Glu His Gly Glu Leu Glu Arg 115 125 120 Pro Leu His Pro Lys Glu Lys Val Leu Glu Gln Ala Leu Gln Trp Cys 135 140 Gln Leu Pro Glu Pro Cys Ser Ala Ser Leu Leu Leu Lys Lys Val Pro 150 155 Leu Ala Gln Ala Gly Cys Leu Phe Thr Gly Ile Arg Arg Glu Ser Pro 165 170 175 Arg Val Gly Leu Phe Ala Val Phe Val Arg Ser His Leu Ala Cys Trp 185 180 Gly Ser Arg Phe Gln Glu Arg Phe Phe Leu Val Ala

<210> 1330 <211> 199 <212> PRT <213> Homo sapiens

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<210> 1331 <211> 81 <212> PRT <213> Homo sapiens

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<210> 1332 <211> 73 <212> PRT <213> Homo sapiens <221> misc_feature

<222> (1)...(73) <223> Xaa = any amino acid or nothing

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<210> 1333 <211> 52 <212> PRT <213> Homo sapiens

<210> 1334

<211> 65 <212> PRT <213> Homo sapiens

<400> 1334

Met Ile Leu Phe Gln Leu Pro Ser Asn Val Phe Val Leu Leu Met Phe 1 5 10 Leu Phe Leu Phe Glu Phe Phe Leu Thr Leu Val Pro Met Trp Ala Phe 25 30 Pro Gly Asp Lys Thr Phe Val Ser Pro Ala Ser Ser Leu Ser Phe Leu 35 . 40 45 Asp Leu Ser Phe Leu Leu Phe Cys Asn Ser Val Ser Ile Gly Lys Gln 55

<210> 1335 <211> 112 <212> PRT <213> Homo sapiens

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<210> 1336 <211> 105 <212> PRT <213> Homo sapiens

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35 40 Tyr Leu Gly Ser Leu Gly Phe Glu Glu Glu Gly Gly Pro Glu Ile Leu

<210> 1337 <211> 57 <212> PRT <213> Homo sapiens

<210> 1338 <211> 59 <212> PRT <213> Homo sapiens

<210> 1339 <211> 50 <212> PRT <213> Homo sapiens

Tyr * 49

<210> 1340 <211> 81 <212> PRT <213> Homo sapiens

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 15

 Arg Asp Leu Phe Leu Phe Leu Pro Trp Gly Leu Cys Ile Leu Tyr Ser Ile Leu 20

 20

 25
 5

 25

 30

 Ser Phe Phe Phe Pro Asp Leu Ser Ser Ser Ala Lys Leu Pro Ser Leu 45

 45

 His Ile Ala Phe Phe Phe Thr Leu Phe Lys Val Thr Lys Gly Thr Ser Pro 50

 50

 55

 50

 Lys Ala Thr Asp Val Pro Val Ala Cys Phe Ile Asn His Asn Arg Thr 85

 65

<210> 1341 <211> 60 <212> PRT <213> Homo sapiens

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<210> 1344 <211> 99 <212> PRT <213> Homo sapiens

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<210> 1345 <211> 112 <212> PRT <213> Homo sapiens

<210> 1346 <211> 360 <212> PRT <213> Homo sapiens

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<210> 1347 <211> 84 <212> PRT <213> Homo sapiens

<210> 1348 <211> 65 <212> PRT <213> Homo sapiens

83

<210> 1349 <211> 58 <212> PRT <213> Homo sapiens

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<210> 1351 <211> 56 <212> PRT <213> Homo sapiens

<210> 1352 <211> 701 <212> PRT <213> Homo sapiens

<400> 1352 Met Glu Pro Leu Cys Pro Leu Leu Leu Val Gly Phe Ser Leu Pro Leu Ala Arg Ala Leu Arg Gly Asn Glu Thr Thr Ala Asp Ser Asn Glu Thr Thr Thr Thr Ser Gly Pro Pro Asp Pro Gly Ala Ser Gln Pro Leu Leu Ala Trp Leu Leu Pro Leu Leu Leu Leu Leu Val Leu Leu Leu Ala Ala Tyr Phe Phe Arg Phe Arg Lys Gln Arg Lys Ala Val Val Ser Thr Ser Asp Lys Lys Met Pro Asn Gly Ile Leu Glu Glu Glu Gln 8.5 Gln Arg Val Met Leu Leu Ser Arg Ser Pro Ser Gly Pro Lys Lys Tyr Phe Pro Ile Pro Val Glu His Leu Glu Glu Glu Ile Arg Ile Arg Ser Ala Asp Asp Cys Lys Gln Phe Arg Glu Glu Phe Asn Ser Leu Pro Ser Gly His Ile Gln Gly Thr Phe Glu Leu Ala Asn Lys Glu Glu Asn Arg Glu Lys Asn Arg Tyr Pro Asn Ile Leu Pro Asn Asp His Ser Arg Val Ile Leu Ser Gln Leu Asp Gly Ile Pro Cys Ser Asp Tyr Ile Asn Ala Ser Tyr Ile Asp Gly Tyr Lys Glu Lys Asn Lys Phe Ile Ala Ala Gln Gly Pro Lys Gln Glu Thr Val Asn Asp Phe Trp Arg Met Val Trp Glu Gln Lys Ser Ala Thr Ile Val Met Leu Thr Asn Leu Lys Glu Arg Lys Glu Glu Lys Cys His Gln Tyr Trp Pro Asp Gln Gly Cys Trp Thr Tyr Gly Asn Ile Arg Val Cys Val Glu Asp Cys Val Val Leu Val Asp Tyr Thr Ile Arg Lys Phe Cys Ile Gln Pro Gln Leu Pro Asp Gly Cys Lys Ala Pro Arg Leu Val Ser Gln Leu His Phe Thr Ser Trp Pro Asp Phe Gly Val Pro Phe Thr Pro Ile Gly Met Leu Lys Phe Leu Lys Lys Val .315 Lys Thr Leu Asn Pro Val His Ala Gly Pro Ile Val Val His Cys Ser Ala Gly Val Gly Arg Thr Gly Thr Phe Ile Val Ile Asp Ala Met Met Ala Met Met His Ala Glu Gln Lys Val Asp Val Phe Glu Phe Val Ser Arg Ile Arg Asn Gln Arg Pro Gln Met Val Gln Thr Asp Met Gln Tyr Thr Phe Ile Tyr Gln Ala Leu Leu Glu Tyr Tyr Leu Tyr Gly Asp Thr Glu Leu Asp Val Ser Ser Leu Glu Lys His Leu Gln Thr Met His Gly Thr Thr Thr His Phe Asp Lys Ile Gly Leu Glu Glu Glu Phe Arg Lys Leu Thr Asn Val Arg Ile Met Lys Glu Asn Met Arg Thr Gly Asn Leu Pro Ala Asn Met Lys Lys Ala Arg Val Ile Gln Ile Ile Pro Tyr Asp

Phe Asn Arg Val Ile Leu Ser Met Lys Arg Gly Gln Glu Tyr Thr Asp 470 475 Tyr Ile Asn Ala Ser Phe Ile Asp Gly Tyr Arg Gln Lys Asp Tyr Phe 485 490 Ile Ala Thr Gln Gly Pro Leu Ala His Thr Val Glu Asp Phe Trp Arg 505 510 Met Ile Trp Glu Trp Lys Ser His Thr Ile Val Met Leu Thr Glu Val 520 525 Gln Glu Arg Glu Gln Asp Lys Cys Tyr Gln Tyr Trp Pro Thr Glu Gly 535 540 Ser Val Thr His Gly Glu Ile Thr Ile Glu Ile Lys Asn Asp Thr Leu 550 555 Ser Glu Ala Ile Ser Ile Arg Asp Phe Leu Val Thr Leu Asn Gln Pro 565 570 Gln Ala Arg Gln Glu Glu Gln Val Arg Val Arg Gln Phe His Phe 580 585 590 His Gly Trp Pro Glu Ile Gly Ile Pro Ala Glu Gly Lys Gly Met Ile 595 600 605 Asp Leu Ile Ala Ala Val Gln Lys Gln Gln Gln Gln Thr Gly Asn His 610 615 620 Pro Ile Thr Val His Cys Ser Ala Gly Ala Gly Arg Thr Gly Thr Phe 625 630 635 Ile Ala Leu Ser Asn Ile Leu Glu Arg Val Lys Ala Glu Gly Leu Leu 645 650 Asp Val Phe Gln Ala Val Lys Ser Leu Arg Leu Gln Arg Pro His Met 660 665 Val Gln Thr Leu Glu Gln Tyr Glu Phe Cys Tyr Lys Val Val Gln Asp 680 Phe Ile Asp Ile Phe Ser Asp Tyr Ala Asn Phe Lys * 695

<210> 1353 <211> 49 <212> PRT <213> Homo sapiens

<210> 1354 <211> 58 <212> PRT <213> Homo sapiens

<400> 1354
Met Ser Val Cys Lys Tyr Thr Val Tyr Gly Phe Phe Ile Phe Ala Phe

<210> 1355 <211> 4261 <212> PRT <213> Homo sapiens

<400> 1355

Met Leu Ser Ala Ile Leu Leu Leu Gln Leu Trp Asp Ser Gly Ala 5 10 Gln Glu Thr Asp Asn Glu Arg Ser Ala Gln Gly Thr Ser Ala Pro Leu 2.0 25 Leu Pro Leu Leu Gln Arg Phe Gln Ser Ile Ile Cys Arg Lys Asp Ala 35 40 Pro His Ser Glu Gly Asp Met His Leu Leu Ser Gly Pro Leu Ser Pro Asn Glu Ser Phe Leu Arg Tyr Leu Thr Leu Pro Gln Asp Asn Glu Leu 70 Ala Ile Asp Leu Arg Gln Thr Ala Val Val Met Ala His Leu Asp 90 Arg Leu Ala Thr Pro Cys Met Pro Pro Leu Cys Ser Ser Pro Thr Ser 105 His Lys Gly Ser Leu Gln Glu Val Ile Gly Trp Gly Leu Ile Gly Trp 115 120 125 Lys Tyr Tyr Ala Asn Val Ile Gly Pro Ile Gln Cys Glu Gly Leu Ala 135 140 Asn Leu Gly Val Thr Gln Ile Ala Cys Ala Glu Lys Arg Phe Leu Ile 150 155 Leu Ser Arg Asn Gly Arg Val Tyr Thr Gln Ala Tyr Asn Ser Asp Thr 165 170 175 Leu Ala Pro Gln Leu Val Gln Gly Leu Ala Ser Arg Asn Ile Val Lys 180 185 Ile Ala Ala His Ser Asp Gly His His Tyr Leu Ala Leu Ala Ala Thr 200 205 Gly Glu Val Tyr Ser Trp Gly Cys Gly Asp Gly Gly Arg Leu Gly His 215 220 Gly Asp Thr Val Pro Leu Glu Glu Pro Lys Val Ile Ser Ala Phe Ser 230 235 Gly Lys Gln Ala Gly Lys His Val Val His Ile Ala Cys Gly Ser Thr 245 250 Tyr Ser Ala Ala Ile Thr Ala Glu Gly Glu Leu Tyr Thr Trp Gly Arg 260 265 270 Gly Asn Tyr Gly Arg Leu Gly His Gly Ser Ser Glu Asp Glu Ala Ile 280 285 Pro Met Leu Val Ala Gly Leu Lys Gly Leu Lys Val Ile Asp Val Ala 295 Cys Gly Ser Gly Asp Ala Gln Thr Leu Ala Val Thr Glu Asn Gly Gln 310 315 Val Trp Ser Trp Gly Asp Gly Asp Tyr Gly Lys Leu Gly Arg Gly Gly 330

Ser Asp Gly Cys Lys Thr Pro Lys Leu Ile Glu Lys Leu Gln Asp Leu Asp Val Val Lys Val Arg Cys Gly Ser Gln Phe Ser Ile Ala Leu Thr Lys Asp Gly Gln Val Tyr Ser Trp Gly Lys Gly Asp Asn Gln Arg Leu Gly His Gly Thr Glu Glu His Val Arg Tyr Pro Lys Leu Leu Glu Gly Leu Gln Gly Lys Lys Val Ile Asp Val Ala Ala Gly Ser Thr His Cys Leu Ala Leu Thr Glu Asp Ser Glu Val His Ser Trp Gly Ser Asn Asp Gln Cys Gln His Phe Asp Thr Leu Arg Val Thr Lys Pro Glu Pro Ala Ala Leu Pro Gly Leu Asp Thr Lys His Ile Val Gly Ile Ala Cys Gly 4.55 Pro Ala Gln Ser Phe Ala Trp Ser Ser Cys Ser Glu Trp Ser Ile Gly Leu Arg Val Pro Phe Val Val Asp Ile Cys Ser Met Thr Phe Glu Gln Leu Asp Leu Leu Arg Gln Val Ser Glu Gly Met Asp Gly Ser Ala Asp Trp Pro Pro Pro Gln Glu Lys Glu Cys Val Ala Val Ala Thr Leu Asn Leu Leu Arg Leu Gln Leu His Ala Ala Ile Ser His Gln Val Asp 530 535 Pro Glu Phe Leu Gly Leu Gly Leu Gly Ser Ile Leu Leu Asn Ser Leu Lys Gln Thr Val Val Thr Leu Ala Ser Ser Ala Gly Val Leu Ser Thr 565 570 575 Val Gln Ser Ala Ala Gln Ala Val Leu Gln Ser Gly Trp Ser Val Leu Leu Pro Thr Ala Glu Glu Arg Ala Arg Ala Leu Ser Ala Leu Leu Pro Cys Ala Val Ser Gly Asn Glu Val Asn Ile Ser Pro Gly Arg Arg Phe Met Ile Asp Leu Leu Val Gly Ser Leu Met Ala Asp Gly Gly Leu Glu Ser Ala Leu His Ala Ala Ile Thr Ala Glu Ile Gln Asp Ile Glu Ala Lys Lys Glu Ala Gln Lys Glu Lys Glu Ile Asp Glu Gln Glu Ala Asn Ala Ser Thr Phe His Arg Ser Arg Thr Pro Leu Asp Lys Asp Leu Ile Asn Thr Gly Ile Cys Glu Ser Ser Gly Lys Gln Cys Leu Pro Leu Val Gln Leu Ile Gln Gln Leu Leu Arg Asn Ile Ala Ser Gln Thr Val Ala Arg Leu Lys Asp Val Ala Arg Arg Ile Ser Ser Cys Leu Asp Phe Glu Gln His Ser Arg Glu Arg Ser Ala Ser Leu Asp Trp Leu Leu Arg Phe Gln Arg Leu Leu Ile Ser Lys Leu Tyr Pro Gly Glu Ser Ile Gly Gln Thr Ser Asp Ile Ser Ser Pro Glu Leu Met Gly Val Gly Ser Leu Leu Lys Lys Tyr Thr Ala Leu Leu Cys Thr His Ile Gly Asp Ile Leu Pro Val Ala Ala Ser Ile Ala Ser Thr Ser Trp Arg His Phe Ala Glu Val

805 810 Ala Tyr Ile Val Glu Gly Asp Phe Thr Gly Val Leu Leu Pro Glu Leu 825 830 Val Val Ser Ile Val Leu Leu Ser Lys Asn Ala Asp Leu Met Gln 840 845 Glu Ala Gly Ala Val Pro Leu Leu Gly Gly Leu Leu Glu His Leu Asp 855 860 Arg Phe Asn His Leu Ala Pro Gly Lys Glu Arg Asp Asp His Glu Glu 870 875 Leu Ala Trp Pro Gly Ile Met Glu Ser Phe Phe Thr Gly Gln Asn Cys 885 890 Arg Asn Asn Glu Glu Val Thr Leu Ile Arg Lys Ala Asp Leu Glu Asn 900 905 His Asn Lys Asp Gly Gly Phe Trp Thr Val Ile Asp Gly Lys Val Tyr 915 920 Asp Ile Lys Asp Phe Gln Thr Gln Ser Leu Thr Gly Asn Ser Ile Leu 930 935 940 Ala Gln Phe Ala Gly Glu Asp Pro Val Val Ala Leu Glu Ala Ala Leu 950 955 Gln Phe Glu Asp Thr Arg Glu Ser Met His Ala Phe Cys Val Gly Gln 965 - 970 975 Tyr Leu Glu Pro Asp Gln Glu Ile Val Thr Ile Pro Asp Leu Gly Ser 980 985 990 Leu Ser Ser Pro Leu Ile Asp Thr Glu Arg Asn Leu Gly Leu Leu Leu 995 1000 1005 Gly Leu His Ala Ser Tyr Leu Ala Met Ser Thr Pro Leu Ser Pro Val 1015 1020 Glu Ile Glu Cys Ala Lys Trp Leu Gln Ser Ser Ile Phe Ser Gly Gly 1030 1035 1040 Leu Gln Thr Ser Gln Ile His Tyr Arg Tyr Asn Glu Glu Lys Asp Glu 1045 1050 1055 Asp His Cys Ser Ser Pro Gly Gly Thr Pro Ala Ser Lys Ser Arg Leu 1060 1065 1070 Cys Ser His Arg Arg Ala Leu Gly Asp His Ser Gln Ala Phe Leu Gln 1075 1080 1085 Ala Ile Ala Asp Asn Asn Ile Gln Asp His Asn Val Lys Asp Phe Leu 1095 1100 Cys Gln Ile Glu Arg Tyr Cys Arg Gln Cys His Leu Thr Thr Pro Ile 1110 1115 1120 Met Phe Pro Pro Glu His Pro Val Glu Glu Val Gly Arg Leu Leu 1125 1130 1135 Cys Cys Leu Leu Lys His Glu Asp Leu Gly His Val Ala Leu Ser Leu 1140 1145 1150 Val His Ala Gly Ala Leu Gly Ile Glu Gln Val Lys His Arg Thr Leu 1155 1160 1165 Pro Lys Ser Val Val Asp Val Cys Arg Val Val Tyr Gln Ala Lys Cys 1170 1175 1180 Ser Leu Ile Lys Thr His Gln Glu Gln Gly Arg Ser Tyr Lys Glu Val 1190 1195 1200 Cys Ala Pro Val Ile Glu Arg Leu Arg Phe Leu Phe Asn Glu Leu Arg 1205 1210 1215 Pro Ala Val Cys Asn Asp Leu Ser Ile Met Ser Lys Phe Lys Leu Leu 1220 1225 1230 Ser Ser Leu Pro Arg Trp Arg Arg Ile Ala Gln Lys Ile Ile Arg Glu 1235 1240 1245 Arg Arg Lys Lys Arg Val Pro Lys Lys Pro Glu Ser Met Asp Asp Glu 1255 1260 Glu Lys Ile Gly Asn Glu Glu Ser Asp Leu Glu Glu Ala Cys Ile Leu 1270 1275

Pro His Ser Pro Ile Asn Val Asp Lys Arg Pro Ile Ala Ile Lys Ser 1285 1290 1295 Pro Lys Asp Lys Trp Gln Pro Leu Leu Ser Thr Val Thr Gly Val His 1300 1305 1310 Lys Tyr Lys Trp Leu Lys Gln Asn Val Gln Gly Leu Tyr Pro Gln Ser 1320 1325 Pro Leu Leu Ser Thr Ile Ala Glu Phe Ala Leu Lys Glu Glu Pro Val 1335 1340 Asp Val Glu Lys Met Arg Lys Cys Leu Leu Lys Gln Leu Glu Arg Ala 1350 1355 Glu Val Arg Leu Glu Gly Ile Asp Thr Ile Leu Lys Leu Ala Ser Lys 1365 1370 1375 Asn Phe Leu Leu Pro Ser Val Gln Tyr Ala Met Phe Cys Gly Trp Gln 1380 1390 1385 Arg Leu Ile Pro Glu Gly Ile Asp Ile Gly Glu Pro Leu Thr Asp Cys 1405 1395 1400 Leu Lys Asp Val Asp Leu Ile Pro Pro Phe Asn Arg Met Leu Leu Glu 1415 1420 Val Thr Phe Gly Lys Leu Tyr Ala Trp Ala Val Gln Asn Ile Arg Asn 1425 1430 1435 Val Leu Met Asp Ala Ser Ala Thr Phe Lys Glu Leu Gly Ile Gln Pro 1445 1450 Val Pro Leu Gln Thr Ile Thr Asn Glu Asn Pro Ser Gly Pro Ser Leu 1465 1460 1470 Gly Thr Ile Pro Gln Ala Arg Phe Leu Leu Val Met Leu Ser Met Leu 1475 1480 1485 Thr Leu Gln His Gly Ala Asn Asn Leu Asp Leu Leu Leu Asn Ser Gly 1495 1500 Met Leu Ala Leu Thr Gln Thr Ala Leu Arg Leu Ile Gly Pro Ser Cys 1510 1515 Asp Asn Val Glu Glu Asp Met Asn Ala Ser Ala Gln Gly Ala Ser Ala 1525 1530 1535 Thr Val Leu Glu Glu Thr Arg Lys Glu Thr Ala Pro Val Gln Leu Pro 1540 1545 1550 Val Ser Gly Pro Glu Leu Ala Ala Met Met Lys Ile Gly Thr Arg Val 1555 1560 1565 Met Arg Gly Val Asp Trp Lys Trp Gly Asp Gln Asp Gly Pro Pro Pro 1570 1580 Gly Leu Gly Arg Val Ile Gly Glu Leu Gly Glu Asp Gly Trp Ile Arg 1585 1590 1595 Val Gln Trp Asp Thr Gly Ser Thr Asn Ser Tyr Arg Met Gly Lys Glu 1605 1610 1615 Gly Lys Tyr Asp Leu Lys Leu Ala Glu Leu Pro Ala Ala Ala Gln Pro 1620 1625 1630 Ser Ala Glu Asp Ser Asp Thr Glu Asp Asp Ser Glu Ala Glu Gln Thr 1640 1645 Glu Arg Asn Ile His Pro Thr Ala Met Met Phe Thr Ser Thr Ile Asn 1650 1655 1660 Leu Leu Gln Thr Leu Cys Leu Ser Ala Gly Val His Ala Glu Ile Met 1670 1675 Gln Ser Glu Ala Thr Lys Thr Leu Cys Gly Leu Leu Arg Met Leu Val 1685 1690 1695 Glu Ser Gly Thr Thr Asp Lys Thr Ser Ser Pro Asn Arg Leu Val Tyr 1700 1705 1710 Arg Glu Gln His Arg Ser Trp Cys Thr Leu Gly Phe Val Arg Ser Ile 1720 1725 1715 Ala Leu Thr Pro Gln Val Cys Gly Ala Leu Ser Ser Pro Gln Trp Ile 1730 1735 1740 Thr Leu Leu Met Lys Val Val Glu Gly His Ala Pro Phe Thr Ala Thr

1745 1750 1755 Ser Leu Gln Arg Gln Ile Leu Ala Val His Leu Leu Gln Ala Val Leu 1770 1765 1775 Pro Ser Trp Asp Lys Thr Glu Arg Ala Arg Asp Met Lys Cys Leu Val 1785 1780 Glu Lys Leu Phe Asp Phe Leu Gly Ser Leu Leu Thr Thr Cys Ser Ser 1795 1800 1805 Asp Val Pro Leu Leu Arg Glu Ser Thr Leu Arg Arg Arg Val Arg 1810 1815 1820 Pro Gln Ala Ser Leu Thr Ala Thr His Ser Ser Thr Leu Ala Glu Glu 1830 1835 Val Val Ala Leu Leu Arg Thr Leu His Ser Leu Thr Gln Trp Asn Gly 1845 1850 1855 Leu Ile Asn Lys Tyr Ile Asn Ser Gln Leu Arg Ser Ile Thr His Ser 1865 1860 1870 Phe Val Gly Arg Pro Ser Glu Gly Ala Gln Leu Glu Asp Tyr Phe Pro 1880 1875 1885 Asp Ser Glu Asn Pro Glu Val Gly Gly Leu Met Ala Val Leu Ala Val 1895 1900 Ile Gly Gly Ile Asp Gly Arg Leu Arg Leu Gly Gly Gln Val Met His 1910 1915 Asp Glu Phe Gly Glu Gly Thr Val Thr Arg Ile Thr Pro Lys Gly Lys 1925 1930 Ile Thr Val Gln Phe Ser Asp Met Arg Thr Cys Arg Val Cys Pro Leu 1940 1945 1950 Asn Gln Leu Lys Pro Leu Pro Ala Val Ala Phe Asn Val Asn Asn Leu 1955 1960 1965 Pro Phe Thr Glu Pro Met Leu Ser Val Trp Ala Gln Leu Val Asn Leu 1970 1975 1980 Ala Gly Ser Lys Leu Glu Lys His Lys Ile Lys Lys Ser Thr Lys Gln 1985 1990 1995 Ala Phe Ala Gly Gln Val Asp Leu Asp Leu Leu Arg Cys Gln Gln Leu 2005 2010 2015 Lys Leu Tyr Ile Leu Lys Ala Gly Arg Ala Leu Leu Ser His Gln Asp 2020 2025 2030 Lys Leu Arg Gln Ile Leu Ser Gln Pro Ala Val Gln Glu Thr Gly Thr 2035 2040 2045 Val His Thr Asp Asp Gly Ala Val Val Ser Pro Asp Leu Gly Asp Met 2055 2060 Ser Pro Glu Gly Pro Gln Pro Pro Met Ile Leu Leu Gln Gln Leu Leu 2070 2075 Ala Ser Ala Thr Gln Pro Ser Pro Val Lys Ala Ile Phe Asp Lys Gln 2085 2095 2090 Glu Leu Glu Ala Ala Ala Leu Ala Val Cys Gln Cys Leu Ala Val Glu 2100 2105 2110 Ser Thr His Pro Ser Ser Pro Gly Phe Glu Asp Cys Ser Ser Ser Glu 2120 2125 Ala Thr Thr Pro Val Ala Val Gln His Ile His Pro Ala Arg Val Lys 2135 2140 Arg Arg Lys Gln Ser Pro Val Pro Ala Leu Pro Ile Val Val Gln Leu 2150 2155 Met Glu Met Gly Phe Ser Arg Arg Asn Ile Glu Phe Ala Leu Lys Ser 2165 2170 Leu Thr Gly Ala Ser Gly Asn Ala Ser Ser Leu Pro Gly Val Glu Ala 2180 2185 2190 Leu Val Gly Trp Leu Leu Asp His Ser Asp Ile Gln Val Thr Glu Leu 2195 2200 2205 Ser Asp Ala Asp Thr Val Ser Asp Glu Tyr Ser Asp Glu Glu Val Val 2215

Glu Asp Val Asp Asp Ala Ala Tyr Ser Met Ser Thr Gly Ala Val Val 2230 2235 Thr Glu Ser Gln Thr Tyr Lys Lys Arg Ala Asp Phe Leu Ser Asn Asp 2245 2250 2255 Asp Tyr Ala Val Tyr Val Arg Glu Asn Ile Gln Val Gly Met Met Val 2260 2265 2270 Arg Cys Cys Arg Ala Tyr Glu Glu Val Cys Glu Gly Asp Val Gly Lys 2285 2275 2280 Val Ile Lys Leu Asp Arg Asp Gly Leu His Asp Leu Asn Val Gln Cys 2295 2300 Asp Trp Gln Gln Lys Gly Gly Thr Tyr Trp Val Arg Tyr Ile His Val 2305 2310 2315 2320 Glu Leu Ile Gly Tyr Pro Pro Pro Ser Ser Ser His Ile Lys Ile 2325 2330 2335 Gly Asp Lys Val Arg Val Lys Ala Ser Val Thr Thr Pro Lys Tyr Lys 2340 2345 2350 Trp Gly Ser Val Thr His Gln Ser Val Gly Val Val Lys Ala Phe Ser 2355 2360 2365 Ala Asn Gly Lys Asp Ile Ile Val Asp Phe Pro Gln Gln Ser His Trp 2370 2375 2380 Thr Gly Leu Leu Ser Glu Met Glu Leu Val Pro Ser Ile His Pro Gly 2390 2395 2400 Val Thr Cys Asp Gly Cys Gln Met Phe Pro Ile Asn Gly Ser Arg Phe 2405 2410 2415 Lys Cys Arg Asn Cys Asp Asp Phe Asp Phe Cys Glu Thr Cys Phe Lys 2420 2425 2430 Thr Lys Lys His Asn Thr Arg His Thr Phe Gly Arg Ile Asn Glu Pro 2435 2440 2445 Gly Gln Ser Ala Val Phe Cys Gly Arg Ser Gly Lys Gln Leu Lys Arg 2450 2455 2460 Cys His Ser Ser Gln Pro Gly Met Leu Leu Asp Ser Trp Ser Arg Met 2470 2475 Val Lys Ser Leu Asn Val Ser Ser Ser Val Asn Gln Ala Ser Arg Leu 2485 2490 2495 Ile Asp Gly Ser Glu Pro Cys Trp Gln Ser Ser Gly Ser Gln Gly Lys 2500 2505 2510 His Trp Ile Arg Leu Glu Ile Phe Pro Asp Val Leu Val His Arg Leu 2515 2520 2525 Lys Met Ile Val Asp Pro Ala Asp Ser Ser Tyr Met Pro Ser Leu Val 2530 2535 2540 Val Val Ser Gly Gly Asn Ser Leu Asn Asn Leu Ile Glu Leu Lys Thr 2545 2550 2555 2560 2545 Ile Asn Ile Asn Pro Ser Asp Thr Thr Val Pro Leu Leu Asn Asp Tyr 2565 2570 2575 Thr Glu Tyr His Arg Tyr Ile Glu Ile Ala Ile Lys Gln Cys Arg Ser 2580 2585 2590 Ser Gly Ile Asp Cys Lys Ile His Gly Leu Ile Leu Leu Gly Arg Ile 2595 2600 Arg Ala Glu Glu Glu Asp Leu Ala Ala Val Pro Phe Leu Ala Ser Asp 2615 2620 Asn Glu Glu Glu Asp Glu Lys Gly Asn Ser Gly Ser Leu Ile Arg 2630 2635 2640 Lys Lys Ala Ala Gly Leu Glu Ser Ala Ala Thr Ile Arg Thr Lys Val 2645 2650 2655 Phe Val Trp Gly Leu Asn Asp Lys Asp Gln Leu Gly Gly Leu Lys Gly 2660 2665 2670 Ser Lys Ile Lys Val Pro Ser Phe Ser Glu Thr Leu Ser Ala Leu Asn 2675 2680 Val Val Gln Val Ala Gly Gly Ser Lys Ser Leu Phe Ala Val Thr Val

2690 2695 2700 Glu Gly Lys Val Tyr Ala Cys Gly Glu Ala Thr Asn Gly Arg Leu Gly 2710 2715 2720 Leu Gly Ile Ser Ser Gly Thr Val Pro Ile Pro Arg Gln Ile Thr Ala 2725 2730 2735 Leu Ser Ser Tyr Val Val Lys Lys Val Ala Val His Ser Gly Gly Arg 2740 2745 2750 His Ala Thr Ala Leu Thr Val Asp Gly Lys Val Phe Ser Trp Gly Glu 2755 2760 2765 Gly Asp Asp Gly Lys Leu Gly His Phe Ser Arg Met Asn Cys Asp Lys 2770 2775 2780 Pro Arg Leu Ile Glu Ala Leu Lys Thr Lys Arg Ile Arg Asp Ile Ala 2790 2795 Cys Gly Ser Ser His Ser Ala Ala Leu Thr Ser Ser Gly Glu Leu Tyr . 2805 2810 2815 Thr Trp Gly Leu Gly Glu Tyr Gly Arg Leu Gly His Gly Asp Asn Thr 2820 2825 2830 Thr Gln Leu Lys Pro Lys Met Val Lys Val Leu Leu Gly His Arg Val 2835 2840 2845 Ile Gln Val Ala Cys Gly Ser Arg Asp Ala Gln Thr Leu Ala Leu Thr 2850 2855 2860 Asp Glu Gly Leu Val Phe Ser Trp Gly Asp Gly Asp Phe Gly Lys Leu 2870 2875 Gly Arg Gly Gly Ser Glu Gly Cys Asn Ile Pro Gln Asn Ile Glu Arg 2885 2890 2895 Leu Asn Gly Gln Gly Val Cys Gln Ile Glu Cys Gly Ala Gln Phe Ser 2900 2905 2910 Leu Ala Leu Thr Lys Ser Gly Val Val Trp Thr Trp Gly Lys Gly Asp 2915 2920 Tyr Phe Arg Leu Gly His Gly Ser Asp Val His Val Arg Lys Pro Gln 2930 2935 2940 Val Val Glu Gly Leu Arg Gly Lys Lys Ile Val His Val Ala Val Gly 2945 2950 2955 Ala Leu His Cys Leu Ala Val Thr Asp Ser Gly Gln Val Tyr Ala Trp 2965 2970 2975 Gly Asp Asn Asp His Gly Gln Gln Gly Asn Gly Thr Thr Thr Val Asn . 2980 2985 2990 Arg Lys Pro Thr Leu Val Gln Gly Leu Glu Gly Gln Lys Ile Thr Arg 3000 3005 2995 Val Ala Cys Gly Ser Ser His Ser Val Ala Trp Thr Thr Val Asp Val 3010 3015 3020 Ala Thr Pro Ser Val His Glu Pro Val Leu Phe Gln Thr Ala Arg Asp 3030 3035 Pro Leu Gly Ala Ser Tyr Leu Gly Val Pro Ser Asp Ala Asp Ser Ser 3045 3050 3055 Ala Ala Ser Asn Lys Ile Ser Gly Ala Ser Asn Ser Lys Pro Asn Arg 3060 3065 3070 Pro Ser Leu Ala Lys Ile Leu Leu Ser Leu Asp Gly Asn Leu Ala Lys 3085 3075 3080 Gln Gln Ala Leu Ser His Ile Leu Thr Ala Leu Gln Ile Met Tyr Ala 3090 3095 3100 Arg Asp Ala Val Val Gly Ala Leu Met Pro Ala Ala Met Ile Ala Pro 3110 3115 3120 Val Glu Cys Pro Ser Phe Ser Ser Ala Ala Pro Ser Asp Ala Ser Ala 3125 3130 Met Ala Ser Pro Met Asn Gly Glu Glu Cys Met Leu Ala Val Asp Ile 3140 3145 3150 Glu Asp Arg Leu Ser Pro Asn Pro Trp Gln Glu Lys Arg Glu Ile Val 3160

Ser Ser Glu Asp Ala Val Thr Pro Ser Ala Val Thr Pro Ser Ala Pro 3175 3180 Ser Ala Ser Ala Arg Pro Phe Ile Pro Val Thr Asp Asp Leu Gly Ala 3185 3190 3195 Ala Ser Ile Ile Ala Glu Thr Met Thr Lys Thr Lys Glu Asp Val Glu 3205 3210 3215 Ser Gln Asn Lys Ala Ala Gly Pro Glu Pro Gln Ala Leu Asp Glu Phe 3220 3225 3230 Thr Ser Leu Leu Ile Ala Asp Asp Thr Arg Val Val Asp Leu Leu 3235 3240 3245 Lys Leu Ser Val Cys Ser Arg Ala Gly Asp Arg Gly Arg Asp Val Leu 3250 3255 3260 Ser Ala Val Leu Ser Gly Met Gly Thr Ala Tyr Pro Gln Val Ala Asp 3265 3270 3280 Met Leu Leu Glu Leu Cys Val Thr Glu Leu Glu Asp Val Ala Thr Asp 3285 3290 3295 Ser Gln Ser Gly Arg Leu Ser Ser Gln Pro Val Val Val Glu Ser Ser 3300 3305 3310 His Pro Tyr Thr Asp Asp Thr Ser Thr Ser Gly Thr Val Lys Ile Pro 3315 3320 3325 Gly Ala Glu Gly Leu Arg Val Glu Phe Asp Arg Gln Cys Ser Thr Glu 3330 3335 3340 Arg Arg His Asp Pro Leu Thr Val Met Asp Gly Val Asn Arg Ile Val 3350 3355 Ser Val Arg Ser Gly Arg Glu Trp Ser Asp Trp Ser Ser Glu Leu Arg 3365 3370 3375 Ile Pro Gly Asp Glu Leu Lys Trp Lys Phe Ile Ser Asp Gly Ser Val 3380 3385 3390 Asn Gly Trp Gly Trp Arg Phe Thr Val Tyr Pro Ile Met Pro Ala Ala 3395 3400 3405 Gly Pro Lys Glu Leu Leu:Ser Asp Arg Cys Val Leu Ser Cys Pro Ser 3410 3415 3420 Met Asp Leu Val Thr Cys Leu Leu Asp Phe Arg Leu Asn Leu Ala Ser 3425 3430 3435 3440 Asn Arg Ser Ile Val Pro Arg Leu Ala Ala Ser Leu Ala Ala Cys Ala 3445 3450 3455 Gln Leu Ser Ala Leu Ala Ala Ser His Arg Met Trp Ala Leu Gln Arg 3460 3465 3470 Leu Arg Lys Leu Leu Thr Thr Glu Phe Gly Gln Ser Ile Asn Ile Asn 3475 3480 3485 Arg Leu Leu Gly Glu Asn Asp Gly Glu Thr Arg Ala Leu Ser Phe Thr 3490 3495 3500 Gly Ser Ala Leu Ala Ala Leu Val Lys Gly Leu Pro Glu Ala Leu Gln 3505 3510 3515 Arg Gln Phe Glu Tyr Glu Asp Pro Ile Val Arg Gly Gly Lys Gln Leu 3525 3530 3535 Leu His Ser Pro Phe Phe Lys Val Leu Val Ala Leu Ala Cys Asp Leu 3540 3545 3550 Glu Leu Asp Thr Leu Pro Cys Cys Ala Glu Thr His Lys Trp Ala Trp 3555 3560 3565 Phe Arg Arg Tyr Cys Met Ala Ser Arg Val Ala Val Ala Leu Asp Lys 3570 3575 3580 Arg Thr Pro Leu Pro Arg Leu Phe Leu Asp Glu Val Ala Lys Lys Ile 3585 3590 3595 Arg Glu Leu Met Ala Asp Ser Glu Asn Met Asp Val Leu His Glu Ser 3605 3610 3615 His Asp Ile Phe Lys Arg Glu Gln Asp Glu Gln Leu Val Gln Trp Met 3625 3630 Asn Arg Arg Pro Asp Asp Trp Thr Leu Ser Ala Gly Gly Ser Gly Thr

3635 3640 Ile Tyr Gly Trp Gly His Asn His Arg Gly Gln Leu Gly Gly Ile Glu 3650 3655 3660 Gly Ala Lys Val Lys Val Pro Thr Pro Cys Glu Ala Leu Ala Thr Leu 3670 3675 Arg Pro Val Gln Leu Ile Gly Gly Glu Gln Thr Leu Phe Ala Val Thr 3685 3690 3695 Ala Asp Gly Lys Leu Tyr Ala Thr Gly Tyr Gly Ala Gly Gly Arg Leu 3700 3705 3710Gly Ile Gly Gly Thr Glu Ser Val Ser Thr Pro Thr Leu Leu Glu Ser 3715 3720 3725 Ile Gln His Val Phe Ile Lys Lys Val Ala Val Asn Ser Gly Gly Lys 3735 3740 His Cys Leu Ala Leu Ser Ser Glu Gly Glu Val Tyr Ser Trp Gly Glu 3745 3750 3755 Ala Glu Asp Gly Lys Leu Gly His Gly Asn Arg Ser Pro Cys Asp Arg 3765 3770 3775 Pro Arg Val Ile Glu Ser Leu Arg Gly Ile Glu Val Val Asp Val Ala 3780 3785 3790 Ala Gly Gly Ala His Ser Ala Cys Val Thr Ala Ala Gly Asp Leu Tyr 3795 3800 3805 Thr Trp Gly Lys Gly Arg Tyr Gly Arg Leu Gly His Ser Asp Ser Glu 3810 3815 3820 Asp Gln Leu Lys Pro Lys Leu Val Glu Ala Leu Gln Gly His Arg Val 3830 3835 Val Asp Ile Ala Cys Gly Ser Gly Asp Ala Gln Thr Leu Cys Leu Thr 3845 3850 3855 Asp Asp Asp Thr Val Trp Ser Trp Gly Asp Gly Asp Tyr Gly Lys Leu 3860 3870 Gly Arg Gly Gly Ser Asp Gly Cys Lys Val Pro Met Lys Ile Asp Ser 3875 3880 3885 Leu Thr Gly Leu Gly Val Val Lys Val Glu Cys Gly Ser Gln Phe Ser 3890 3895 3900 Val Ala Leu Thr Lys Ser Gly Ala Val Tyr Thr Trp Gly Lys Gly Asp 3905 3910 3915 Tyr His Arg Leu Gly His Gly Ser Asp Asp His Val Arg Arg Pro Arg 3925 3930 3935 Gln Val Gln Gly Leu Gln Gly Lys Lys Val Ile Ala Ile Ala Thr Gly 3940 3945 3950 Ser Leu His Cys Val Cys Cys Thr Glu Asp Gly Glu Val Tyr Thr Trp 3960 3965 Gly Asp Asn Asp Glu Gly Gln Leu Gly Asp Gly Thr Thr Asn Ala Ile 3970 3975 3980 Gln Arg Pro Arg Leu Val Ala Ala Leu Gln Gly Lys Lys Val Asn Arg 3985 3990 3995 4000 Val Ala Cys Gly Ser Ala His Thr Leu Ala Trp Ser Thr Ser Lys Pro 4005 4010 4015 Ala Ser Ala Gly Lys Leu Pro Ala Gln Val Pro Met Glu Tyr Asn His 4020 4025 4030 Leu Gln Glu Ile Pro Ile Ile Ala Leu Arg Asn Arg Leu Leu Leu 4035 4040 4045 His His Leu Ser Glu Leu Phe Cys Pro Cys Ile Pro Met Phe Asp Leu 4050 4055 4060 Glu Gly Ser Leu Asp Glu Thr Gly Leu Gly Pro Ser Val Gly Phe Asp 4070 4075 Thr Leu Arg Gly Ile Leu Ile Ser Gln Gly Lys Glu Ala Ala Phe Arg 4085 4090 4095 Lys Val Val Gln Ala Thr Met Val Arg Asp Arg Gln His Gly Pro Val 4105

Val Glu Leu Asn Arg Ile Gln Val Lys Arg Ser Arg Ser Lys Gly Gly 4115 4120 4125 Leu Ala Gly Pro Asp Gly Thr Lys Ser Val Phe Gly Gln Met Cys Ala 4130 4135 4140 Lys Met Ser Ser Phe Gly Pro Asp Ser Leu Leu Leu Pro His Arg Val 4145 4150 4155 Trp Lys Val Lys Phe Val Gly Glu Ser Val Asp Asp Cys Gly Gly Gly 4165 4170 4175 Tyr Ser Glu Ser Ile Ala Glu Ile Cys Glu Glu Leu Gln Asn Gly Leu 4180 4190 4185 Thr Pro Leu Leu Ile Val Thr Pro Asn Gly Arg Asp Glu Ser Gly Ala 4195 4200 4205 Asn Arg Asp Cys Tyr Leu Leu Ser Pro Ala Ala Arg Ala Pro Val His 4210 4215 4220 Ser Ser Met Phe Arg Phe Leu Gly Val Leu Leu Gly Ile Ala Ile Arg 4225 4230 4235 4240 Thr Gly Ser Pro Leu Ser Leu Asn Pro Cys Arg Ala Leu Ser Gly Ser 4245 4250 4255 Ser Trp Leu Gly * 4260

<210> 1356 <211> 64 <212> PRT <213> Homo sapiens

<400> 1356

Met Ser Lys Val Lys Pro Leu His Gly Ala Pro Ala Pro Leu Leu Val 5 10 . 15 Ser Leu Cys Leu Leu Ser Trp Cys Gly Leu Pro Gly Val Ile Val His 20 25 3.0 Val Thr Tyr Val Ser Pro Arg His Leu Ser Asn Thr Arg Ser Gly Leu 3.5 40 4.5 Glu Ser Ile His Gly Cys Asp Pro Met His Gly Ser Pro Val Gly * 55 60

<211> 111 <212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(111) <223> Xaa = any amino acid or nothing

<400> 1357

<210> 1357

Met Ile Phe Asn Lys Ala Ala Asp Thr Leu Gly Asp Val Trp Ile Leu 1 5 10 15 Leu Ala Thr Leu Lys Val Leu Ser Leu Leu Trp Leu Leu Tyr Tyr Val 25 Ala Ser Thr Thr Arg Gln Pro His Ala Val Leu Tyr Gln Asp Pro His 40 Ala Gly Pro Leu Trp Val Arg Ser Ser Leu Val Leu Phe Gly Ser Cys

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<210> 1359 <211> 73 <212> PRT <213> Homo sapiens

<210> 1360 <211> 57 <212> PRT <213> Homo sapiens

Phe Phe Phe Ala Phe Phe Arg Thr * 50 55 56

<210> 1361 <211> 77 <212> PRT <213> Homo sapiens

<210> 1362 <211> 106 <212> PRT <213> Homo sapiens

<400> 1362 Met Gln Asn Arg Thr Gly Leu Ile Leu Cys Ala Leu Ala Leu Leu Met Gly Phe Leu Met Val Cys Leu Gly Ala Phe Phe Ile Ser Trp Gly Ser 25 Ile Phe Asp Cys Gln Gly Ser Leu Ile Ala Ala Tyr Leu Leu Pro 35 40 4.5 Leu Gly Phe Val Ile Leu Leu Ser Gly Ile Phe Trp Ser Asn Tyr Arg 50 55 60 Gln Val Thr Glu Ser Lys Gly Val Leu Arg His Met Leu Arg Gln His 70 75 Leu Ala His Gly Ala Leu Pro Val Ala Thr Val Asp Arg Ala Ala Leu 85 90 Leu Lys Ile Met Cys Lys Gln Leu Leu

<210> 1363 <211> 57 <212> PRT <213> Homo sapiens

<210> 1364 <211> 75 <212> PRT <213> Homo sapiens

<210> 1365 <211> 58 <212> PRT <213> Homo sapiens

<210> 1366 <211> 58 <212> PRT <213> Homo sapiens

Leu Asp Leu Tyr Ser Ser Leu Phe Phe * 50 55 57

<210> 1367 <211> 48 <212> PRT <213> Homo sapiens

<400> 1367

<210> 1368 <211> 96 <212> PRT <213> Homo sapiens

<400> 1368

Met Gly Arg Arg Lys Ser Phe Phe Phe Leu Phe Leu Glu Cys Arg Gln 1 5 10 Lys Gly Leu His Ile Pro Leu Cys Thr Cys Ser His Ala Pro Arg Pro 20 25 Pro Leu Ala Ala Pro Ser Ala Leu Ile Leu Pro Pro Glu Ile Ser His Thr Ser Arg Gly Ile Leu Leu Ser His Gly Leu Phe Pro Thr Ala Thr 50 60 Met Pro Leu Phe Phe Pro Ser His Ala Ser His Ser Pro Thr Val Thr 65 70 75 Met Pro Leu Phe Phe Pro Ser His Ala Ser His Ser Pro Ser Thr ′ 85

<210> 1369 <211> 76 <212> PRT <213> Homo sapiens

<400> 1369

65 70 75

<210> 1370 <211> 79 <212> PRT <213> Homo sapiens

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 Cys
 Ser
 Cys
 Leu
 His
 Thr
 Leu
 Gln
 Arg
 Phe
 Leu
 His
 Phe
 Val

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 Phe
 His
 Leu
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 12
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<210> 1371 <211> 227 <212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(227) <223> Xaa = any amino acid or nothing

<400> 1371 Met Leu Tyr Phe Gln Leu Val Ile Met Ala Gly Thr Val Leu Leu Ala 10 Tyr Tyr Phe Glu Cys Thr Asp Thr Phe Gln Val His Ile Gln Gly Phe 25 30 Phe Cys Gln Asp Gly Asp Leu Met Lys Pro Tyr Pro Gly Thr Glu Glu 35 40 Glu Ser Phe Ile Thr Pro Leu Val Leu Tyr Cys Val Leu Ala Ala Thr 55 60 Pro Thr Ala Ile Ile Phe Ile Gly Glu Ile Ser Met Tyr Phe Ile Lys 70 75 Ser Thr Arg Glu Ser Leu Ile Ala Gln Glu Lys Thr Ile Leu Thr Gly 90 Glu Cys Cys Tyr Leu Asn Pro Leu Leu Arg Arg Ile Ile Arg Phe Thr 105 Gly Val Phe Ala Phe Gly Leu Phe Ala Thr Asp Ile Phe Val Asn Ala 115 120 125 Gly Gln Val Val Thr Gly His Leu Thr Pro Tyr Phe Leu Thr Val Cys 135 140 Lys Pro Asn Tyr Thr Ser Ala Asp Cys Gln Ala His His Gln Phe Ile 155 150 Asn Asn Gly Asn Ile Cys Thr Gly Asp Leu Gly Ser Asp Arg Lys Gly 165 170 Ser Glu Ile Leu Ser Leu Gln Thr Arg Cys Ser Glu His Leu Leu Arg 185

<210> 1372 <211> 99 <212> PRT <213> Homo sapiens

<400> 1372 Met Phe Leu Ser Leu Ser Leu Thr Leu Cys Leu Cys Phe Ser Phe Phe 1 5 . 10 Cys Leu Tyr Leu Ser Leu Ser Leu Tyr Leu Arg Ser Phe Phe Cys Leu 20 25 Pro Phe His Val Ser Val Phe Leu Cys Leu Phe Pro Ser Val Leu Phe 35 40 Leu Ser Val Ala Leu Gly Ser Pro Glu Asn His Ile Ser Trp Arg Lys 50 55 60 Val Gly Glu Glu Leu Lys Leu Ala Ser His Arg Asn Phe Cys Ser Leu 70 75 Ile Gln Met Met Arg Ser Asn Lys Pro Ser Pro Ser Arg Gln Arg Gly 85 90 Trp Ala *

Trp Ala 98

> <210> 1373 <211> 69 <212> PRT <213> Homo sapiens

<400> 1373 Met Leu His Thr Pro Gln Thr Cys Arg Pro Gly Leu Cys Val Leu Ala 5 Ser Arg Pro Val Leu Tyr Thr Leu Cys Leu Leu Ile Pro Val Leu Cys 20 25 30 Gly Asp Thr Phe Trp Ala Ser Trp Ser Leu Leu Thr Lys Ala Thr Pro 40 45 Ser Ser Leu Leu Cys Leu Ser Asp Lys Ser Ile Pro Ser Leu Ile Ser 50 55 60 Lys Gly Asp Ser * 65 68

<210> 1374 <211> 296 <212> PRT <213> Homo sapiens

<400> 1374 Met Arg Ser Lys Ile Met Ile His Ile His Ile Phe Leu Leu Ala Ser 10 Phe Arg Phe Lys Glu His Val Gln Asn Asn Leu Pro Arg Asp Leu Leu 20 Thr Gly Glu Gln Phe Ile Gln Leu Arg Arg Glu Leu Ala Ser Val Asn 35 40 Gly His Ser Gly Asp Asp Gly Pro Pro Gly Asp Asp Leu Pro Ser Gly 55 60 Ile Glu Asp Ile Thr Asp Pro Ala Lys Leu Ile Thr Glu Ile Glu Asn 70 75 Met Arg His Arg Ile Ile Glu Ile His Gln Glu Met Phe Asn Tyr Asn 8.5 90 Glu His Glu Val Ser Lys Arg Trp Thr Phe Glu Glu Gly Ile Lys Arg 100 105 110 Pro Tyr Phe His Val Lys Pro Leu Glu Lys Ala Gln Leu Lys Asn Trp 115 120 125 Lys Glu Tyr Leu Glu Phe Glu Ile Glu Asn Gly Thr His Glu Arg Val 135 140 Val Val Leu Phe Glu Arg Cys Val Ile Ser Cys Ala Leu Tyr Glu Glu 150 155 Phe Trp Ile Lys Tyr Ala Lys Tyr Met Glu Asn His Ser Ile Glu Gly 165 170 Val Arg His Val Phe Ser Arg Ala Cys Thr Ile His Leu Pro Lys Lys 180 185 Pro Met Val His Met Leu Trp Ala Ala Phe Glu Glu Gln Gln Gly Asn 195 200 205 Ile Asn Glu Ala Arg Asn Ile Leu Lys Thr Phe Glu Glu Cys Val Leu 215 Gly Leu Ala Met Val Arg Leu Arg Arg Val Ser Leu Glu Arg Arg His 230 235 Gly Asn Leu Glu Glu Ala Glu His Leu Leu Gln Asp Ala Ile Lys Asn 245 250 255 Ala Lys Ser Asn Asn Glu Ser Ser Phe Tyr Ala Val Lys Leu Ala Arg 260 265 270 His Leu Phe Lys Ile Gln Lys Asn Leu Pro Lys Ser Arg Lys Val Leu 280 Leu Glu Ala Ile Glu Arg Asp Lys 295 296

<210> 1375 <211> 75 <212> PRT <213> Homo sapiens

 Ala Ala Pro Phe
 Phe

<210> 1376 <211> 61 <212> PRT <213> Homo sapiens

<210> 1377 <211> 110 <212> PRT <213> Homo sapiens

<400> 1377 Met Trp Val Trp Val Thr Ala Ala His Leu Leu Cys Ser Leu Ala Ala Ser Phe Val Lys Lys Lys Ser Leu Gly Lys Leu Arg Val Asp Val Cys 20 30 Arg Ser Pro Pro Pro Glu Gly Ser Arg Thr Gln Thr Ser Ser Leu 40 45 Phe Tyr Arg Gly Gly Asn Gly Ala Ser Tyr Ala Asn Tyr Ile Leu His 50 60His Thr Met Ala Leu Glu Gly Gln Arg Ser His Trp Ala Pro Cys Val 70 75 80 Ser Cys Pro Ala Gln Gly Leu Ala Leu Arg Arg Gly Cys Thr Thr Phe 85 90 Leu His Lys Asn Lys Gly Gly Thr Glu Ala Val Thr Val * 105 109

<210> 1378 <211> 47 <212> PRT <213> Homo sapiens

<210> 1379 <211> 140 <212> PRT <213> Homo sapiens

<400> 1379 Met Arg His Pro Ser Pro Trp Pro Phe Leu Phe Phe Cys Phe Val Pro 1 5 10 Ala Thr Leu Arg Ser Phe Pro Ser Gly Leu Val Trp Pro Gly Cys Trp 25 3.0 Trp Glu Pro Arg Ala Ser Pro Ser Ser Leu Ala Pro Gly Met Lys Ser 35 45 40 Gln Leu Trp Ala Ala Ala Trp Arg Pro Gly Thr Ser Leu Gln Gly Met 55 60 Ala Gly Ile Leu Arg Gln Ala Ala Glu Ala Gly Pro Ala Gly Val Ala 70 75 Leu Ile Leu Ile Lys Gly Thr Gly Asn Glu Glu Pro Leu Gly Pro Leu 85 90 Pro Ser Arg Cys Leu Cys Pro Pro Pro Glu Glu Pro Arg Phe His Trp 105 Ala Leu Gly Lys Glu Pro Thr Gly Pro Gly Arg Pro Gln Pro Val Gln 120 His His Ile Glu Gly Pro His Pro Val Gly Phe Gly 135

<210> 1380 <211> 50 <212> PRT <213> Homo sapiens

<210> 1381 <211> 78 <212> PRT <213> Homo sapiens

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50 55 60 Pro His * 65 66

<210> 1385 <211> 50 <212> PRT <213> Homo sapiens

<210> 1386 <211> 123 <212> PRT <213> Homo sapiens

<400> 1386 Met Lys Trp Val Thr Phe Ile Ser Leu Leu Phe Leu Phe Ser Ser Ala 1 5 10 Tyr Ser Arg Gly Pro Lys Ala Glu Phe Ala Glu Val Ser Lys Leu Val 30 20 25 Thr Asp Leu Thr Lys Val His Thr Glu Cys Cys His Gly Asp Leu Leu 45 35 40 Glu Cys Ala Asp Asp Arg Ala Asp Leu Ala Lys Tyr Ile Cys Glu Asn 55 60 Gln Asp Ser Ile Ser Ser Lys Leu Lys Glu Cys Cys Glu Lys Pro Leu 70 Leu Glu Lys Ser His Cys Ile Ala Glu Val Glu Asn Asp Glu Met Pro 90 85 Ala Asp Leu Pro Ser Leu Ala Ala Asp Phe Val Glu Ser Lys Asp Val 100 105 Cys Lys Asn Tyr Ala Glu Ala Lys Asp Val Phe 120

<210> 1387 <211> 65 <212> PRT <213> Homo sapiens

<400> 1387
Met Pro Arg Leu Phe Ser Pro Leu Ile Leu Leu His Thr Leu Ser Leu
1 5 10 15

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<210> 1389 <211> 76 <212> PRT <213> Homo sapiens

<210> 1390 <211> 149 <212> PRT <213> Homo sapiens

 $<\!400>$ 1390 Met Ala Ala Ser Pro Ala Arg Pro Ala Val Leu Ala Leu Thr Gly Leu 1 5 . 10 . 15 Ala Leu Leu Leu Leu Leu Cys Trp Gly Pro Gly Gly Ile Ser Gly Asn

20 25 Lys Leu Lys Leu Met Leu Gln Lys Arg Glu Ala Pro Val Pro Thr Lys 35 40 45 Thr Lys Val Ala Val Asp Glu Asn Lys Ala Lys Glu Phe Leu Gly Ser 55 60 Leu Lys Arg Gln Lys Arg Gln Leu Trp Asp Arg Thr Arg Pro Glu Val 75 . 70 Gln Gln Trp Tyr Gln Gln Phe Leu Tyr Met Gly Phe Asp Glu Ala Lys \$90\$ 95Phe Glu Asp Asp Ile Thr Tyr Trp Leu Asn Arg Asp Arg Asn Gly His 100 105 Glu Tyr Tyr Gly Asp Tyr Tyr Gln Arg His Tyr Asp Glu Asp Ser Ala 115 120 125 Ile Gly Pro Arg Ser Pro Tyr Gly Phe Arg His Gly Ala Ser Val Asn 130 135 Tyr Asp Asp Tyr 145 1.48

<210> 1391 <211> 125 <212> PRT <213> Homo sapiens

<400> 1391 Met Val Met Gly Trp His Trp Pro Gln Gly Leu Gly Leu Ser Leu Ser 1 5 10 Leu Cys Pro Ser Asp Leu Asp Gly Trp Val Ser Arg Glu Val Pro Leu 20 25 Leu Asp Arg Pro Gln Ala Leu Pro Pro Cys Val Gln Ile Leu Ser Ala 40 45 Pro Ala Ser Thr Ser Cys Pro Ser Ala Leu Ser Pro Trp His Asp Pro . 60 55 Gly Leu Pro Val Thr Ser Gln Asn His Phe Ala Trp Phe Pro Leu Gly 70 75 Ser Lys Ala Cys Leu Gly Pro Ser Ile Asp Arg Glu Ala Val Lys Glu 85 90 Ile Asn Ala Glu Glu Gly Val Arg Arg Gln Thr Gln Gly Pro Ile Lys 100 105 Val Arg Lys Gln Ala Gly Cys Gly Gly Ser Cys Leu * 115 120

<210> 1392 <211> 56 <212> PRT <213> Homo sapiens

Ile Ile Leu Pro Leu His Pro * 50 55

<210> 1393 <211> 55 <212> PRT <213> Homo sapiens

<210> 1394 <211> 51 <212> PRT <213> Homo sapiens

<210> 1395 <211> 105 <212> PRT <213> Homo sapiens

 <400> 1395

 Met
 Pro
 Qro
 Asn
 Pro
 Gly
 Ala
 Val
 Leu
 Gly
 Leu
 Pro
 Pro

95 Phe Gly Leu Leu Ser Leu Pro Ser Ile
100 105

<210> 1396 <211> 49 <212> PRT <213> Homo sapiens

<210> 1397 <211> 104 <212> PRT <213> Homo sapiens

<400> 1397 Met Leu Ser Trp Val Phe Pro Gly Ser Val Phe Gly Leu Cys Leu Ser 5 10 Val Trp Val Phe Trp His Gln Ala Ser Leu Gly Arg Ala Ser Gly Cys 25 Ala Pro Ala Leu Arg Val Gly Leu Ile Pro Gly Cys Arg Gly Leu Arg 35 40 45Ala Glu Leu Phe His Leu Glu Asp Lys Asp Gly Ser Ser Gly Leu Gly 50 55 60 Gly Gly Gly Ala Gly His Asp Leu Ile Leu Arg Arg Ala Trp Cys 70 75 Trp Gly Leu Thr Asp Asp Gly Glu Ala Arg Val Gln Ala Leu Gly Met 85 Thr Pro Gly Ile Ala Phe Ser * 100

<210> 1398 <211> 82 <212> PRT <213> Homo sapiens

<210> 1399 <211> 68 <212> PRT <213> Homo sapiens

<210> 1400 <211> 54 <212> PRT <213> Homo sapiens

<210> 1401 <211> 232 <212> PRT <213> Homo sapiens

20 25 Val Ile Arg Ala Leu Arg Leu Trp Arg Thr Ala Lys Leu Gln Val Thr 40 Leu Lys Lys Tyr Ser Val His Leu Glu Asp Met Ala Thr Asn Ser Arg Ala Phe Thr Asn Leu Val Arg Lys Ala Leu Arg Leu Ile Gln Glu Thr 70 75 Glu Val Ile Ser Arg Gly Phe Thr Leu Leu Leu Asp Arg Val Ser Ala 85 90 Ala Cys Pro Phe Asn Lys Ala Gly Gln His Pro Ser Gln His Leu Ile 100 105 Gly Leu Arg Lys Ala Val Tyr Arg Thr Leu Arg Ala Ser Phe Gln Ala 115 120 125 Ala Arg Leu Ala Thr Leu Tyr Met Leu Lys Asn Tyr Pro Leu Asn Ser 140 135 Glu Ser Asp Asn Val Thr Asn Tyr Ile Cys Val Val Pro Phe Lys Glu 145 150 155 160 Leu Gly Leu Gly Leu Ser Glu Glu Gln Ile Ser Glu Glu Glu Ala His 165 170 175 Lys Leu Tyr Arg Trp Leu Gln Pro Ala Cys Ile Glu Gly Phe Val Pro 180 185 Thr Leu Gly Gly Thr Glu Phe Arg Val Leu Gln Thr Val Ser Pro Ile 195 200 205 Thr Phe Tyr Ser Gln Phe Thr Ser Trp Ala Leu Thr Tyr Ser Ser Thr 210 215 220 Ser Ala Ser Ser Tyr Leu Ile * 230 231

<210> 1402 <211> 48 <212> PRT <213> Homo sapiens

<210> 1403 <211> 53 <212> PRT <213> Homo sapiens

<400> 1403

Tyr Cys Pro His * 50 52

<210> 1404 <211> 90 <212> PRT <213> Homo sapiens

 Met
 Arg
 Val
 Phe
 Cys
 Val
 Gly
 Leu
 Leu
 Phe
 Ser
 Val
 Thr
 Trp
 Ala

 Ala
 Pro
 Thr
 Pro
 Gln
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 Glu
 Lys
 Thr
 Lys
 Gln
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 Cys
 Val

 Glu
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 Lys
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 Ile

 Val
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 Glu
 Lys
 Lys
 Leu
 Ser
 Leu
 Ser
 Glu
 Ala
 Ser
 Glu
 Asn

 Lys
 Gly
 Ser
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 Asn
 Tyr
 Phe
 Phe
 Free
 Free
 Free
 Free
 Free

<210> 1405 <211> 477 <212> PRT <213> Homo sapiens

<400> 1405 Met Ala Gly Arg Gly Gly Ser Ala Leu Leu Ala Leu Cys Gly Ala Leu 10 Ala Ala Cys Gly Trp Leu Leu Gly Ala Glu Ala Gln Glu Pro Gly Ala 20 25 Pro Ala Ala Gly Met Arg Arg Arg Arg Leu Gln Gln Glu Asp Gly 35 40 Ile Ser Phe Glu Tyr His Arg Tyr Pro Glu Leu Arg Glu Ala Leu Val 55 Ser Val Trp Leu Gln Cys Thr Ala Ile Ser Arg Ile Tyr Thr Val Gly 70 75 Arg Ser Phe Glu Gly Arg Glu Leu Leu Val Ile Glu Leu Ser Asp Asn 85 90 Pro Gly Val His Glu Pro Gly Glu Pro Glu Phe Lys Tyr Ile Gly Asn 100 105 Met His Gly Asn Glu Ala Val Gly Arg Glu Leu Leu Ile Phe Leu Ala 115 120 Gln Tyr Leu Cys Asn Glu Tyr Gln Lys Gly Asn Glu Thr Ile Val Asn 135 Leu Ile His Ser Thr Arg Ile His Ile Met Pro Ser Leu Asn Pro Asp 150 155 Gly Phe Glu Lys Ala Ala Ser Gln Pro Gly Glu Leu Lys Asp Trp Phe 170 175 Val Gly Arg Ser Asn Ala Gln Gly Ile Asp Leu Asn Arg Asn Phe Pro 180 185 Asp Leu Asp Arg Ile Val Tyr Val Asn Glu Lys Glu Gly Gly Pro Asn

195 200 205 Asn His Leu Leu Lys Asn Met Lys Lys Ile Val Asp Gln Asn Thr Lys 210 215 220 Leu Ala Pro Glu Thr Lys Ala Val Ile His Trp Ile Met Asp Ile Pro 225 230 235 Phe Val Leu Ser Ala Asn Leu His Gly Gly Asp Leu Val Ala Asn Tyr 250 245 Pro Tyr Asp Glu Thr Arg Ser Gly Ser Ala His Glu Tyr Ser Ser Ser 260 265 Pro Asp Asp Ala Ile Phe Gln Ser Leu Ala Arg Ala Tyr Ser Ser Phe 275 280 285 Asn Pro Ala Met Ser Asp Pro Asn Arg Pro Pro Cys Arg Lys Asn Asp 300 295 Asp Asp Ser Ser Phe Val Asp Gly Thr Thr Asn Gly Gly Ala Trp Tyr 310 315 Ser Val Pro Gly Gly Met Gln Asp Phe Asn Tyr Leu Ser Ser Asn Cys 325 330 335 Phe Glu Ile Thr Val Glu Leu Ser Cys Glu Lys Phe Pro Pro Glu Glu 340 345 350 Thr Leu Lys Thr Tyr Trp Glu Asp Asn Lys Asn Ser Leu Ile Ser Tyr 365 355 360 Leu Glu Gln Ile His Arg Gly Val Lys Gly Phe Val Arg Asp Leu Gln 370 375 380 Gly Asn Pro Ile Ala Asn Ala Thr Ile Ser Val Glu Gly Ile Asp His 390 395 Asp Val Thr Ser Ala Lys Asp Gly Asp Tyr Trp Arg Leu Leu Ile Pro 405 410 Gly Asn Tyr Lys Leu Thr Ala Ser Ala Pro Gly Tyr Leu Ala Ile Thr 420 425 Lys Lys Val Ala Val Pro Tyr Ser Pro Ala Ala Gly Val Asp Phe Glu 435 440 445 Leu Glu Ser Phe Ser Glu Arg Lys Glu Glu Glu Lys Glu Glu Leu Met 450 455 460 Glu Trp Trp Lys Met Met Ser Glu Thr Leu Asn Phe * 470 475 476

<210> 1406 <211> 55 <212> PRT <213> Homo sapiens

<210> 1407 <211> 66 <212> PRT

<213> Homo sapiens

<210> 1408 <211> 58 <212> PRT <213> Homo sapiens

<210> 1409 <211> 72 <212> PRT <213> Homo sapiens

<210> 1410 <211> 53 <212> PRT <213> Homo sapiens

<210> 1411 <211> 82 <212> PRT <213> Homo sapiens

<400> 1411 Met Ala Ser Gln Ser Met Cys Phe Leu Trp Leu Ala Pro Val Thr Trp 5 1.0 Cys Val Met Phe Ser Ser Arg Thr Cys Tyr Ser Pro Cys Gly Asn Phe 25 30 Ser Thr Ala Pro Gly Arg Val Ile Phe His Ser Trp Asp Arg Ala Gln 35 40 Phe Val Tyr Ser Phe Leu Ser Arg Trp Arg Leu Gly Leu Phe Pro Pro 50 55 60 Leu Ala Ser Val Asn Gly Asp Ala Val Ile Met Gly Val Pro Val Phe 65 Val * 70 75 81

<210> 1412 <211> 72 <212> PRT <213> Homo sapiens

| Met | Phe | Leu | Leu | Leu | Phe | Cys | Leu | Met | Phe | Asp | Phe | Thr | Lys | Val | Phe | Leu | Leu | Leu | Phe | Phe | Leu | Ser | Thr | Cys | Leu | Phe | Leu | Ser | Phe | Phe

<210> 1413 <211> 59 <212> PRT

<213> Homo sapiens

<210> 1414 <211> 78 <212> PRT <213> Homo sapiens

<210> 1415 <211> 171 <212> PRT <213> Homo sapiens

<400> 1415 Met His Met Met Lys Leu Ser Ile Lys Val Leu Leu Gln Ser Ala Leu 5 10 Ser Leu Gly Arg Ser Leu Asp Ala Asp His Ala Pro Leu Gln Gln Phe 25 Phe Val Val Met Glu His Cys Leu Lys His Gly Leu Lys Val Lys Lys 40 Ser Phe Ile Gly Gln Asn Lys Ser Phe Phe Gly Pro Leu Glu Leu Val 55 60 Glu Lys Leu Cys Pro Glu Ala Ser Asp Ile Ala Thr Ser Val Arg Asn 75 70 Leu Pro Glu Leu Lys Thr Ala Val Gly Arg Gly Arg Ala Trp Leu Tyr
85 90 95 85 90 Leu Ala Leu Met Gln Lys Lys Leu Ala Asp Tyr Leu Lys Val Leu Ile 100 105 110 Asp Asn Lys His Leu Leu Ser Glu Phe Tyr Glu Pro Glu Ala Leu Met 115 . 120 125 Met Glu Glu Gly Met Val Ile Val Gly Leu Leu Val Gly Leu Asn

<210> 1416 <211> 77 <212> PRT <213> Homo sapiens

<210> 1417 <211> 249 <212> PRT <213> Homo sapiens

<400> 1417 Met Glu Lys Ile Pro Glu Ile Gly Lys Phe Gly Glu Lys Ala Pro Pro 10 Ala Pro Ser His Val Trp Arg Pro Ala Ala Leu Phe Leu Thr Leu Leu 20 25 Cys Leu Leu Leu Ile Gly Leu Gly Val Leu Ala Ser Met Phe His 35 40 Val Thr Leu Lys Ile Glu Met Lys Lys Met Asn Lys Leu Gln Asn Ile 60 Ser Glu Glu Leu Gln Arg Asn Ile Ser Leu Gln Leu Met Ser Asn Met 70 75 Asn Ile Ser Asn Lys Ile Arg Asn Leu Ser Thr Thr Leu Gln Thr Ile 90 85 Ala Thr Lys Leu Cys Arg Glu Leu Tyr Ser Lys Glu Gln Glu His Lys . 100 105 Cys Lys Pro Cys Pro Arg Arg Trp Ile Trp His Lys Asp Ser Cys Tyr 120 Phe Leu Ser Asp Asp Val Gln Thr Trp Gln Glu Ser Lys Met Ala Cys 130 135 140 Ala Ala Gln Asn Ala Ser Leu Leu Lys Ile Asn Asn Lys Asn Ala Leu 150 155 Glu Phe Ile Lys Ser Gln Ser Arg Ser Tyr Asp Tyr Trp Leu Gly Leu 170 175 Ser Pro Glu Glu Asp Ser Thr Arg Gly Met Arg Val Asp Asn Ile Ile 185

<210> 1418 <211> 65 <212> PRT <213> Homo sapiens

<210> 1419 <211> 468 <212> PRT <213> Homo sapiens

<400> 1419 Met Leu Leu Leu Leu Leu Pro Leu Leu Trp Gly Arg Glu Arg Val 1 5 10 15 Glu Gly Gln Lys Ser Asn Arg Lys Asp Tyr Ser Leu Thr Met Gln Ser 20 25 Ser Val Thr Val Gln Glu Gly Met Cys Val His Val Arg Cys Ser Phe 35 40 45 Ser Tyr Pro Val Asp Ser Gln Thr Asp Ser Asp Pro Val His Gly Tyr 50 55 Trp Phe Arg Ala Gly Asn Asp Ile Ser Trp Lys Ala Pro Val Ala Thr 6.5 70 75 80 Asn Asn Pro Ala Trp Ala Val Gln Glu Glu Thr Arg Asp Arg Phe His 85 90 Leu Leu Gly Asp Pro Gln Thr Lys Asn Cys Thr Leu Ser Ile Arg Asp 100 105 110 Ala Arg Met Ser Asp Ala Gly Arg Tyr Phe Phe Arg Met Glu Lys Gly 120 125 Asn Ile Lys Trp Asn Tyr Lys Tyr Asp Gln Leu Ser Val Asn Val Thr 135 140 Ala Leu Thr His Arg Pro Asn Ile Leu Ile Pro Gly Thr Leu Glu Ser 145 150 155 Gly Cys Phe Gln Asn Leu Thr Cys Ser Val Pro Trp Ala Cys Glu Gln

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. 165
                                170
 Gly Thr Pro Pro Met Ile Ser Trp Met Gly Thr Ser Val Ser Pro Leu
        180
                    185
                                              190
 His Pro Ser Thr Thr Arg Ser Ser Val Leu Thr Leu Ile Pro Gln Pro
                      200
 Gln His His Gly Thr Ser Leu Thr Cys Gln Val Thr Leu Pro Gly Ala
                   215
                                       220
Gly Val Thr Thr Asn Arg Thr Ile Gln Leu Asn Val Ser Tyr Pro Pro
            230
                                   235
Gln Asn Leu Thr Val Thr Val Phe Gln Gly Glu Gly Thr Ala Ser Thr
           245
                               250
Ala Leu Gly Asn Ser Ser Ser Leu Ser Val Leu Glu Gly Gln Ser Leu
          260
                 265
Arg Leu Val Cys Ala Val Asp Ser Asn Pro Pro Ala Arg Leu Ser Trp
     275
                280
                                      285
Thr Trp Arg Ser Leu Thr Leu Tyr Pro Ser Gln Pro Ser Asn Pro Leu
           295
                                     300
Val Leu Glu Leu Gln Val His Leu Gly Asp Glu Gly Glu Phe Thr Cys
                 310
                                   315
Arg Ala Gln Asn Ser Leu Gly Ser Gln His Val Ser Leu Asn Leu Ser
             325
                               330
Leu Gln Gln Glu Tyr Thr Gly Lys Met Arg Pro Val Ser Gly Val Leu
          340
                            345
                                               350
Leu Gly Ala Val Gly Gly Ala Gly Ala Thr Ala Leu Val Phe Leu Ser
      355
                                 365
                        360
Phe Cys Val Ile Phe Ile Val Val Arg Ser Cys Arg Lys Lys Ser Ala
                   375
Arg Pro Ala Ala Asp Val Gly Asp Ile Gly Met Lys Asp Ala Asn Thr
                 390
Ile Arg Gly Ser Ala Ser Gln Gly Asn Leu Thr Glu Ser Trp Ala Asp
            405
                               410
Asp Asn Pro Arg His His Gly Leu Ala Ala His Ser Ser Gly Glu Glu
          420
                          425
                                      430
Arg Glu Ile Gln Tyr Ala Pro Leu Ser Phe His Lys Gly Glu Pro Gln
                        440
                                 445
Asp Leu Ser Gly Gln Glu Ala Thr Asn Asn Glu Tyr Ser Glu Ile Lys
  450
                                      460
Ile Pro Lys *
465 467
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<210> 1420 <211> 150 <212> PRT <213> Homo sapiens

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<210> 1421 <211> 89 <212> PRT <213> Homo sapiens

 400> 1421

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 Tyr
 Val
 Phe
 Leu
 Leu
 Cys
 Pro
 Ala
 Cys
 Gly
 Arg
 Leu
 Met
 Gly
 Ser

 Thr
 Tyr
 Met
 Arg
 Leu
 Leu
 Pro
 Gln
 Ser
 Glu
 Pro
 Ala
 Leu
 His
 Asn
 Arg

 Ile
 Leu
 Arg
 Gln
 Thr
 Glu
 Pro
 Leu
 Leu
 Tyr
 Phe
 Lys
 Arg
 Gly
 Lys
 Gln

 Gln
 Gly
 Leu
 Phe
 Tyr
 Ala
 Ser
 Phe
 Pro
 Ala
 Val
 His
 Arg
 Met
 Asp
 Ser

 Gln
 Gly
 Leu
 Phe
 Tyr
 Ala
 Ser
 Phe
 Pro
 Ala
 Val
 His
 Arg
 Met
 Asp
 Ser

 Gln
 Arg
 Arg
 Thr
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 Val
 Ile
 Leu
 Tyr
 Lys
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 Thr
 Arg
 Thr

<210> 1422 <211> 83 <212> PRT <213> Homo sapiens

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<210> 1423 <211> 54

<212> PRT <213> Homo sapiens

<210> 1424 <211> 73 <212> PRT <213> Homo sapiens

<210> 1425 <211> 245 <212> PRT <213> Homo sapiens

<400> 1425 Met Ala Cys Tyr Leu Leu Val Ala Asn Ile Leu Leu Val Asn Leu Leu 1 5 10 15 Ile Ala Val Phe Asn Asn Thr Phe Phe Glu Val Lys Ser Ile Ser Asn 20 25 Gln Val Trp Lys Phe Gln Arg Tyr Gln Leu Ile Met Thr Phe His Glu 35 40 45 Arg Pro Val Leu Pro Pro Pro Leu Ile Ile Phe Ser His Met Thr Met 55 60 Ile Phe Gln His Leu Cys Cys Arg Trp Arg Lys His Glu Ser Asp Pro 70 75 Asp Glu Arg Asp Tyr Gly Leu Lys Leu Phe Ile Thr Asp Asp Glu Leu 85 90 Lys Lys Val His Asp Phe Glu Glu Gln Cys Ile Glu Glu Tyr Phe Arg 100 105 110 Glu Lys Asp Asp Arg Phe Asn Ser Ser Asn Asp Glu Arg Ile Arg Val 120

Thr Ser Glu Arg Val Glu Asn Met Ser Met Arg Leu Glu Glu Val Asn 135 140 Glu Arg Glu His Ser Met Lys Ala Ser Leu Gln Thr Val Asp Ile Arg 150 155 Leu Ala Gln Leu Glu Asp Leu Ile Gly Arg Met Ala Thr Ala Leu Glu 165 170 175 Arg Leu Thr Gly Leu Glu Arg Ala Glu Ser Asn Lys Ile Arg Ser Arg 180 185 190 Thr Ser Ser Asp Cys Thr Asp Ala Arg Leu His Trp Pro Val Arg Ala 195 200 205 Ala Leu Thr Ser Gln Glu Arg Glu His Leu Ser Ala Pro Lys Arg Gly 215 220 Leu Glu Pro Trp Gln Asn Ile Leu Phe Ile Gln Tyr Lys Pro Ala Ala 235 Ser Ser Ser Thr * 244

<210> 1426 <211> 520 <212> PRT <213> Homo sapiens <221> misc_feature

<222> (1) ... (520) <223> Xaa = any amino acid or nothing

<400> 1426 Met Asp Ile Leu Leu Leu Leu Phe Phe Met Ile Ile Phe Ala Ile 10 Leu Gly Phe Tyr Leu Phe Ser Pro Asn Pro Ser Asp Pro Tyr Phe Ser 20 25 Thr Leu Glu Asn Ser Ile Val Ser Leu Phe Val Leu Leu Thr Thr Ala 40 Asn Phe Pro Asp Val Met Met Pro Ser Tyr Ser Arg Asn Pro Trp Ser 55 60 Cys Val Phe Phe Ile Val Tyr Leu Ser Ile Glu Leu Tyr Phe Ile Met 70 75 Asn Leu Leu Ala Val Val Phe Asp Thr Phe Asn Asp Ile Glu Lys 85 90 Arg Lys Phe Lys Ser Leu Leu Leu His Lys Arg Thr Ala Ile Gln His 100 105 Ala Tyr Arg Leu Leu Ile Ser Gln Arg Arg Pro Ala Gly Ile Ser Tyr 115 120 125 Arg Gln Phe Glu Gly Leu Met Arg Phe Tyr Lys Pro Arg Met Ser Ala 135 140 Arg Glu Arg Tyr Leu Thr Phe Lys Ala Leu Asn Gln Asn Asn Thr Pro 145 150 155 Leu Leu Ser Leu Lys Asp Phe Tyr Asp Ile Tyr Glu Val Ala Ala Leu 165 170 Lys Trp Lys Ala Thr Lys Asn Arg Glu His Trp Val Asp Glu Leu Pro 185 190 Arg Thr Ala Leu Leu Ile Phe Lys Gly Ile Asn Ile Leu Val Lys Ala 200 205 Lys Ala Phe Gln Tyr Phe Met Tyr Leu Val Val Ala Val Asn Gly Val 215 220 Trp Ile Leu Val Glu Thr Phe Met Leu Lys Gly Gly Asn Phe Phe Ser

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225
                  230
                                    235
 Lys His Val Pro Trp Ser Tyr Leu Val Phe Leu Thr Ile Tyr Gly Val
            245
                        250
                                                 255
 Glu Leu Phe Leu Lys Val Ala Gly Leu Gly Pro Val Glu Tyr Leu Ser
          260
                            265
 Ser Gly Trp Asn Leu Phe Asp Phe Ser Val Thr Val Phe Ala Phe Leu
       275
                        280
                                          285
 Gly Leu Leu Ala Leu Ala Leu Asn Met Glu Pro Phe Tyr Phe Ile Val
    290
                    295
                                     300
 Val Leu Arg Pro Leu Gln Leu Leu Arg Leu Phe Lys Leu Lys Glu Arg
                 310
                                   315
Tyr Arg Asn Val Leu Asp Thr Met Phe Glu Leu Leu Pro Arg Met Ala
           325
                             330
Ser Leu Gly Leu Thr Leu Leu Ile Phe Tyr Tyr Ser Phe Ala Ile Val
                                                  335
           340
                           345
                                     350
Gly Met Glu Phe Phe Cys Gly Ile Val Phe Pro Asn Cys Cys Asn Thr
      355
             360
                                        365
Ser Thr Val Ala Asp Ala Tyr Arg Trp Arg Asn His Thr Val Gly Asn
                 375
                              380
Arg Thr Val Val Glu Glu Gly Tyr Tyr Tyr Leu Asn Asn Phe Asp Asn
                 390
                                395
Ile Leu Asn Ser Phe Val Thr Leu Phe Glu Leu Thr Val Val Asn Asn
              405
                              410
Trp Tyr Ile Ile Met Glu Gly Val Thr Ser Gln Thr Ser His Trp Ser
        420
                          425
                                             430
Arg Leu Tyr Phe Met Thr Phe Tyr Ile Ala Thr Met Val Val Met Thr
     435
                      440
Ile Ile Val Ala Phe Ile Leu Glu Ala Phe Val Phe Arg Met Asn Tyr
                  455
Ser Arg Lys Asn Gln Asp Ser Glu Val Asp Gly Gly Ile Thr Leu Glu
           470
                                   475
Lys Glu Ile Ser Lys Glu Glu Leu Val Ala Val Leu Glu Leu Tyr Arg
            485
                              490 495
Glu Ala Arg Xaa Ala Ser Ser Asp Val Thr Arg Leu Leu Glu Thr Leu
         500
                           505
Ser Gln Met Glu Arg Tyr Gln Gln
     515
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<210> 1427 <211> 106 <212> PRT <213> Homo sapiens

<400> 1427 Met Ser Pro Gln His Leu Leu Leu Thr Leu Pro Leu Pro Leu Arg Ser Pro Ile Leu Phe Ser His Thr Ala Gln Leu Leu Val Leu Thr Arg Ile 2.0 Ala Phe Arg Ala Cys Glu Leu Phe Phe Phe Val Met Val Ser Leu Cys Cys Pro Gly Ile His Ser Phe Ile Ala Thr Ile Thr Tyr Glu Arg Asn Ala Phe Gln Ser Ile Ser Ser Val Gln Gln His Leu His Phe Gly Cys Ala Leu Ser Pro Pro Ala Pro Arg Glu Ser Phe Ser Pro Cys Leu

Thr Thr His Arg Leu Pro Ser Cys Phe * 100 105

<210> 1428 <211> 841 <212> PRT <213> Homo sapiens

<400> 1428 Met Ala Leu Ala Ser Ala Ala Pro Gly Ser Ile Phe Cys Lys Gln Leu 10 Leu Phe Ser Leu Leu Val Leu Thr Leu Leu Cys Asp Ala Cys Gln Lys 20 . 25 Val Tyr Leu Arg Val Pro Ser His Leu Gln Ala Glu Thr Leu Val Gly 40 Lys Val Asn Leu Glu Glu Cys Leu Lys Ser Ala Ser Leu Ile Arg Ser 55 60 Ser Asp Pro Ala Phe Arg Ile Leu Glu Asp Gly Ser Ile Tyr Thr Thr 70 75 His Asp Leu Ile Leu Ser Ser Glu Arg Lys Ser Phe Ser Ile Phe Leu 85 90 Ser Asp Gly Gln Arg Arg Glu Gln Glu Ile Lys Val Val Leu Ser 105 Ala Arg Glu Asn Lys Ser Pro Lys Lys Arg His Thr Lys Asp Thr Ala 115 120 125 Leu Lys Arg Ser Lys Arg Arg Trp Ala Pro Ile Pro Ala Ser Leu Met 135 Glu Asn Ser Leu Gly Pro Phe Pro Gln His Val Gln Gln Ile Gln Ser 150 Asp Ala Ala Gln Asn Tyr Thr Ile Phe Tyr Ser Ile Ser Gly Pro Gly 170 Val Asp Lys Glu Pro Phe Asn Leu Phe Tyr Ile Glu Lys Asp Thr Gly 185 190 Asp Ile Phe Cys Thr Arg Ser Ile Asp Arg Glu Lys Tyr Glu Gln Phe 195 200 205 Ala Leu Tyr Gly Tyr Ala Thr Thr Ala Asp Gly Tyr Ala Pro Glu Tyr 215 220 Pro Leu Pro Leu Ile Ile Lys Ile Glu Asp Asp Asn Asp Asn Ala Pro 230 235 Tyr Phe Glu His Arg Val Thr Ile Phe Thr Val Pro Glu Asn Cys Arg 245 250 Ser Gly Thr Ser Val Gly Lys Val Thr Ala Thr Asp Leu Asp Glu Pro 260 265 Asp Thr Leu His Thr Arg Leu Lys Tyr Lys Ile Leu Gln Gln Ile Pro 280 285 Asp His Pro Lys His Phe Ser Ile His Pro Asp Thr Gly Val Ile Thr 295 300 Thr Thr Thr Pro Phe Leu Asp Arg Glu Lys Cys Asp Thr Tyr Gln Leu 310 315 Ile Met Glu Val Arg Asp Met Gly Gly Gln Pro Phe Gly Leu Phe Asn 325 330 Thr Gly Thr Ile Thr Ile Ser Leu Glu Asp Glu Asn Asp Asn Pro Pro 340 345 Ser Phe Thr Glu Thr Ser Tyr Val Thr Glu Val Glu Glu Asn Arg Ile . 355 360 Asp Val Glu Ile Leu Arg Met Lys Val Gln Asp Gln Asp Leu Pro Asn

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			42	U				425	5				121	٦.	e Leu
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Se:	r Asp	Glu	ı Gly	/ Pro	Glu	Cys	His	Pro	Pro	Va]	L Lys	· Val	l Ile	e Glr	ser .
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		212	,				520					525	:		Arg
	220					535					540				Gln
545	: Asn	ııte	Ser	Val	Val 550	Ala	Gly	Asp	Ala	Val	Gly	Arg	Ser	Cys	Thr
		Leu	Val	Val	His	Leu	Asp	Asp	Tur	555	Aen	ui a	70.7	Dwa	560
				202					570					E75	
			200		Thr			585					590		
		222			Pro		600					605			
	010				Ser	6 I 5					620				
023					Ile 630					635					E40
				645	Ile				650					655	Ala
			990		Val			665					670	Ser	
		0/3			Lys		680					685	Asn		
	690				Ile	695					700	Ser			
105					Thr 710					715					720
				725	Glu				730					725	Ser
			740		Gly			745					750	Arg	
		155	Thr	Ser	Asn	Ile	Cys 760	Asp	Thr			765	Val		
Val	Gly 770	Gly	Gln	Gly	Ile :	Lys 775	Thr	Gln	Gln	Ser	Phe 780	Glu	Met	Val	Lys
Gly 785	Gly	Tyr	Thr	Leu	Asp :		Asn .	Lys	Gly	Gly 795	Gly	His	Gln	Thr	
Glu	Ser	Val	Lys	Gly 805	Val (3ly	Gln (Gly .	Asp 810	Thr	Gly	Arg			800 Tyr
Thr	Asp	Trp	Gln 820		Phe :	Thr (3ln	Pro . 825	Arg	Leu	Gly		Glu 830	815 Ser	Ile
Arg				Leu	Ile I		Asn 340	*					430		

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<210> 1429.
<211> 262
<212> PRT
<213> Homo sapiens
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<400> 1429 Met Glu Leu Beu Gln Val Thr Ile Leu Phe Leu Leu Pro Ser Ile Cys 10 Ser Ser Asn Ser Thr Gly Val Leu Glu Ala Ala Asn Asn Ser Leu Val 25 Val Thr Thr Thr Lys Pro Ser Ile Thr Thr Pro Asn Thr Glu Ser Leu 40 Gln Lys Asn Val Val Thr Pro Thr Thr Gly Thr Thr Pro Lys Gly Thr 55 60 Ile Thr Asn Glu Leu Leu Lys Met Ser Leu Met Ser Thr Ala Thr Phe 70 75 Leu Thr Ser Lys Asp Glu Gly Leu Lys Ala Thr Thr Thr Asp Val Arg 8.5 90 Lys Asn Asp Ser Ile Ile Ser Asn Val Thr Val Thr Ser Val Thr Leu 100 105 110 Pro Asn Ala Val Ser Thr Leu Gln Ser Ser Lys Pro Lys Thr Glu Thr 120 125 Gln Ser Ser Ile Lys Thr Thr Glu Ile Pro Gly Ser Val Leu Gln Pro 135 140 Asp Ala Ser Pro Ser Lys Thr Gly Thr Leu Thr Ser Ile Pro Val Thr 150 155 Ile Pro Glu Asn Thr Ser Gln Ser Gln Val Ile Gly Thr Glu Gly Gly 165 170 175 Lys Asn Ala Ser Thr Ser Ala Thr Ser Arg Ser Tyr Ser Ser Ile Ile 180 185 190 Leu Pro Val Val Ile Ala Leu Ile Val Ile Thr Leu Ser Val Phe Val 205 200 Leu Val Gly Leu Tyr Arg Met Cys Trp Lys Ala Asp Pro Gly Thr Pro 215 220 Glu Asn Gly Asn Asp Gln Pro Gln Ser Asp Lys Glu Ser Val Lys Leu 230 235 240 Leu Thr Val Lys Thr Ile Ser His Glu Ser Gly Glu His Ser Ala Gln 245 250 Gly Lys Thr Lys Asn * 260 261

<210> 1430 <211> 66 <212> PRT <213> Homo sapiens

35 40 45

Gln Asn Pro Asn Asn Val Leu Ile Phe Leu Gln Lys Trp Lys Asn Arg
50 55 60

Cys *

<210> 1431 <211> 437 <212> PRT <213> Homo sapiens

<400> 1431 Met Leu Lys Val Ser Ala Val Leu Cys Val Cys Ala Ala Ala Trp Cys 5 10 Ser Gln Ser Leu Ala Ala Ala Ala Ala Val Ala Ala Gly Gly Arg 2.0 25 Ser Asp Gly Gly Asn Phe Leu Asp Asp Lys Gln Trp Leu Thr Thr Ile 40 Ser Gln Tyr Asp Lys Glu Val Gly Gln Trp Asn Lys Phe Arg Asp Glu 55 Val Glu Asp Asp Tyr Phe Arg Thr Trp Ser Pro Gly Lys Pro Phe Asp
65 70 75 80 Gln Ala Leu Asp Pro Ala Lys Asp Pro Cys Leu Lys Met Lys Cys Ser 90 Arg His Lys Val Cys Ile Ala Gln Asp Ser Gln Thr Ala Val Cys Ile 100 105 Ser His Arg Arg Leu Thr His Arg Met Lys Glu Ala Gly Val Asp His 120 125 Arg Gln Trp Arg Gly Pro Ile Leu Ser Thr Cys Lys Gln Cys Pro Val 135 140 Val Tyr Pro Ser Pro Val Cys Gly Ser Asp Gly His Thr Tyr Ser Phe 150 155 Gln Cys Lys Leu Glu Tyr Gln Ala Cys Val Leu Gly Lys Gln Ile Ser 165 170 Val Lys Cys Glu Gly His Cys Pro Cys Pro Ser Asp Lys Pro Thr Ser 180 185 Thr Ser Arg Asn Val Lys Arg Ala Cys Ser Asp Leu Glu Phe Arg Glu 200 Val Ala Asn Arg Leu Arg Asp Trp Phe Lys Ala Leu His Glu Ser Gly 215 Ser Gln Asn Lys Lys Thr Lys Thr Leu Leu Arg Pro Glu Arg Ser Arg 230 235 Phe Asp Thr Ser Ile Leu Pro Ile Cys Lys Asp Ser Leu Gly Trp Met 245 250 Phe Asn Arg Leu Asp Thr Asn Tyr Asp Leu Leu Leu Asp Gln Ser Glu 260 265 Leu Arg Ser Ile Tyr Leu Asp Lys Asn Glu Gln Cys Thr Lys Ala Phe 280 285 Phe Asn Ser Cys Asp Thr Tyr Lys Asp Ser Leu Ile Ser Asn Asn Glu 295 300 Trp Cys Tyr Cys Phe Gln Arg Gln Gln Asp Pro Pro Cys Gln Thr Glu 310 315 Leu Ser Asn Ile Gln Lys Arg Gln Gly Val Lys Lys Leu Leu Gly Gln 325 330 Tyr Ile Pro Leu Cys Asp Glu Asp Gly Tyr Tyr Lys Pro Thr Gln Cys 345

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His Gly Ser Val Gly Gln Cys Trp Cys Val Asp Arg Tyr Gly Asn Glu
                          360
                                           365
Val Met Gly Ser Arg Ile Asn Gly Val Ala Asp Cys Ala Ile Asp Phe
                     375
Glu Ile Ser Gly Asp Phe Ala Ser Gly Asp Phe His Glu Trp Thr Asp
                                       380
                 390
                                    395
Asp Glu Asp Asp Glu Asp Asp Ile Met Asn Asp Glu Asp Glu Ile Glu
              405
                        410
Asp Asp Asp Glu Asp Glu Gly Asp Asp Asp Asp Gly Gly Asp Asp His
        420
                   425
Asp Val Tyr Ile *
      435 436
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<210> 1432 <211> 53 <212> PRT <213> Homo sapiens

<210> 1433 <211> 76 <212> PRT <213> Homo sapiens

<210> 1434 <211> 169 <212> PRT <213> Homo sapiens

<400> 1434 Met Glu Ser Trp Trp Gly Leu Pro Cys Leu Ala Phe Leu Cys Phe Leu 10 Met His Ala Arg Gly Gln Arg Asp Phe Asp Leu Ala Asp Ala Leu Asp 25 Asp Pro Glu Pro Thr Lys Lys Pro Asn Ser Asp Ile Tyr Pro Lys Pro 35 40 4.5 Lys Pro Pro Tyr Tyr Pro Gln Pro Glu Asn Pro Asp Ser Gly Gly Asn 55 60 Ile Tyr Pro Arg Pro Lys Pro Arg Pro Gln Pro Gln Pro Gly Asn Ser 75 Gly Asn Ser Gly Gly Ser Tyr Phe Asn Asp Val Asp Arg Asp Gly 85 90 Arg Tyr Pro Pro Arg Pro Arg Pro Pro Pro Ala Gly Gly Gly 105 Gly Gly Tyr Ser Ser Tyr Gly Asn Ser Asp Asn Thr His Gly Gly Asp 115 120 125 His His Ser Thr Tyr Gly Asn Pro Glu Gly Asn Met Val Ala Lys Ile 135 140 Val Ser Pro Ile Val Ser Val Val Val Thr Leu Leu Gly Ala Ala 150 155 Ala Gln Leu Phe Gln Thr Lys Gln $\,\,$ * 168

<210> 1435 <211> 162 <212> PRT <213> Homo sapiens

<400> 1435 Met Arg Phe Val Thr Leu Ser Ser Ala Cys Leu Cys Pro Cys Pro Leu 5 10 Gly Pro Cys Trp Thr Arg His Pro Ser Tyr Gly Asn Leu His Glu Ala 20 25 Ser Thr Ser Leu Pro Pro Arg His Trp Thr Gly Ala Arg Lys Trp Asn 4.0 45 Glu Ser Ser His Cys Leu Lys Ser Trp Arg Pro Ser Ser Ala Ser Gly 55 60 Ser Pro Glu Asn Leu Gly Ser Asp Arg Arg Thr Glu Thr Glu Gly Arg 70 75 Glu Arg Asp Cys Asp Arg Glu Ala Glu Glu Gly Asp Arg Val Arg Glu 85 90 Glu Gln Asn Ser Leu Gln Trp Glu Gln Arg Gln Lys Cys Gly Gly Pro 100 105 Thr Gly Arg Gly Gly Arg Glu Gly Glu Gly Arg Arg Glu Gly Gln Leu 115 120 125 Pro Val Gln Val Ala Val Arg Ala Leu Gly Leu Gly Arg Gly Thr Leu 135 140 Leu Leu Ala Ser His Thr Gly Ser Ile Arg Gly Pro Arg Glu Gln 145 Val Ser 162

<210> 1436

<211> 77 <212> PRT <213> Homo sapiens

<210> 1437 <211> 85 <212> PRT <213> Homo sapiens

<400> 1437 Met Cys Ser Leu Pro Arg His Leu Leu Phe Leu Ile Ile Phe Arg Ala 5 10 Tyr Ser Leu Ala Val Asp Leu Ser Thr His Ser Leu Thr Thr Ala Lys 20 25 Phe Pro Ser Pro Ile Val Leu Pro Thr Leu Tyr Arg Ser Val Ile Val 35 40 Ala Gly Ile Trp Lys Pro Ser Ser Asp Thr Ser Ser Pro Gly Pro Ser 55 60 Phe Ser Ser Ile Glu Leu Gln Thr Leu Val Asp Ala Ser Asp Val Glu 75 Glu Pro Pro Cys 84

<210> 1438 <211> 76 <212> PRT <213> Homo sapiens

<210> 1439 <211> 425 <212> PRT <213> Homo sapiens

<400> 1439 Met Ser Leu Thr Ile Trp Thr Val Cys Gly Val Leu Ser Leu Phe Gly 10 Ala Leu Ser Tyr Ala Glu Leu Gly Thr Thr Ile Lys Lys Ser Gly Gly 20 25 His Tyr Thr Tyr Ile Leu Glu Val Phe Gly Pro Leu Pro Ala Phe Val 40 Arg Val Trp Val Glu Leu Leu Ile Ile Arg Pro Ala Ala Thr Ala Val 55 60 Ile Ser Leu Ala Phe Gly Arg Tyr Ile Leu Glu Pro Phe Phe Ile Gln 75 70 Cys Glu Ile Pro Glu Leu Ala Ile Lys Leu Ile Thr Ala Val Gly Ile 85 90 Thr Val Val Met Val Leu Asn Ser Met Ser Val Ser Trp Ser Ala Arg 100 105 Ile Gln Ile Phe Leu Thr Phe Cys Lys Leu Thr Ala Ile Leu Ile Ile 115 120 Ile Val Pro Gly Val Met Gln Leu Ile Lys Gly Gln Thr Gln Asn Phe 140 Lys Asp Ala Phe Ser Gly Arg Asp Ser Ser Ile Thr Arg Leu Pro Leu 150 155 160 Ala Phe Tyr Tyr Gly Met Tyr Ala Tyr Ala Gly Trp Phe Tyr Leu Asn 165 170 Phe Val Thr Glu Glu Val Glu Asn Pro Glu Lys Thr Ile Pro Leu Ala 180 185 190 Ile Cys Ile Ser Met Ala Ile Val Thr Ile Gly Tyr Val Leu Thr Asn 195 200 205 Val Ala Tyr Phe Thr Thr Ile Asn Ala Glu Glu Leu Leu Ser Asn 215 220 Ala Val Ala Val Thr Phe Ser Glu Arg Leu Leu Gly Asn Phe Ser Leu 230 235 Ala Val Pro Ile Phe Val Ala Leu Ser Cys Phe Gly Ser Met Asn Gly 245 Gly Val Phe Ala Val Ser Arg Leu Phe Tyr Val Ala Ser Arg Glu Gly 265 His Leu Pro Glu Ile Leu Ser Met Ile His Val Arg Lys His Thr Pro 280 285 Leu Pro Ala Val Ile Val Leu His Pro Leu Thr Met Ile Met Leu Phe 295 300 Ser Gly Asp Leu Asp Ser Leu Leu Asn Phe Leu Ser Phe Ala Arg Trp 310 315 Leu Phe Ile Gly Leu Ala Val Ala Gly Leu Ile Tyr Leu Arg Tyr Lys 325 330 Cys Pro Asp Met His Arg Pro Phe Lys Val Pro Leu Phe Ile Pro Ala 340 345 350 Leu Phe Ser Phe Thr Cys Leu Phe Met Val Ala Leu Ser Leu Tyr Ser 355 360 365 Asp Pro Phe Ser Thr Gly Ile Gly Phe Val Ile Thr Leu Thr Gly Val 375 380 Pro Ala Tyr Tyr Leu Phe Ile Ile Trp Asp Lys Lys Pro Arg Trp Phe

<210> 1440 <211> 70 <212> PRT <213> Homo sapiens

<210> 1441 <211> 1691 <212> PRT <213> Homo sapiens

<400> 1441 Met Trp Ser Leu His Ile Val Leu Met Arg Cys Ser Phe Arg Leu Thr 10 Lys Ser Leu Ala Thr Gly Pro Trp Ser Leu Ile Leu Ile Leu Phe Ser 20 25 Val Gln Tyr Val Tyr Gly Ser Gly Lys Lys Tyr Ile Gly Pro Cys Gly 40 Gly Arg Asp Cys Ser Val Cys His Cys Val Pro Glu Lys Gly Ser Arg 55 Gly Pro Pro Gly Pro Gly Pro Gln Gly Pro Ile Gly Pro Leu Gly 70 Ala Pro Gly Pro Ile Gly Leu Ser Gly Glu Lys Gly Met Arg Gly Asp 85 90 Arg Gly Pro Pro Gly Ala Ala Gly Asp Lys Gly Asp Lys Gly Pro Thr 100 105 110 Gly Val Pro Gly Phe Pro Gly Leu Asp Gly Ile Pro Gly His Pro Gly 120 125 Pro Pro Gly Pro Arg Gly Lys Pro Gly Met Ser Gly His Asn Gly Ser 135 140 Arg Gly Asp Pro Gly Phe Pro Gly Gly Arg Gly Ala Leu Gly Pro Gly 150 155 Gly Pro Leu Gly His Pro Gly Glu Lys Gly Glu Lys Gly Asn Ser Val 165 170 Phe Ile Leu Gly Ala Val Lys Gly Ile Gln Gly Asp Arg Gly Asp Pro

Gly Leu Pro Gly Leu Pro Gly Ser Trp Gly Ala Gly Gly Pro Ala Gly

180 185

Pro Thr Gly Tyr Pro Gly Glu Pro Gly Leu Val Gly Pro Pro Gly Gln Pro Gly Arg Pro Gly Leu Lys Gly Asn Pro Gly Val Gly Val Lys Gly Gln Met Gly Asp Pro Gly Glu Val Gly Gln Gln Gly Ser Pro Gly Pro Thr Leu Leu Val Glu Pro Pro Asp Phe Cys Leu Tyr Lys Gly Glu Lys Gly Ile Lys Gly Ile Pro Gly Met Val Gly Leu Pro Gly Pro Pro Gly Arg Lys Gly Glu Ser Gly Ile Gly Ala Lys Gly Glu Lys Gly Ile Pro Gly Phe Pro Gly Pro Arg Gly Asp Pro Gly Ser Tyr Gly Ser Pro Gly Phe Pro Gly Leu Lys Gly Glu Leu Gly Leu Val Gly Asp Pro Gly Leu Phe Gly Leu Ile Gly Pro Lys Gly Asp Pro Gly Asn Arg Gly His Pro Gly Pro Pro Gly Val Leu Val Thr Pro Pro Leu Pro Leu Lys Gly Pro Pro Gly Asp Pro Gly Phe Pro Gly Arg Tyr Gly Glu Thr Gly Asp Val Gly Pro Pro Gly Pro Pro Gly Leu Leu Gly Arg Pro Gly Glu Ala Cys Ala Gly Met Ile Gly Pro Pro Gly Pro Gln Gly Phe Pro Gly Leu Pro Gly Leu Pro Gly Glu Ala Gly Ile Pro Gly Arg Pro Asp Ser Ala Pro Gly Lys Pro Gly Lys Pro Gly Ser Pro Gly Leu Pro Gly Ala Pro Gly Leu Gln Gly Leu Pro Gly Ser Ser Val Ile Tyr Cys Ser Val Gly Asn Pro Gly Pro Gln Gly Ile Lys Gly Lys Val Gly Pro Pro Gly Gly Arg Gly Pro Lys Gly Glu Lys Gly Asn Glu Gly Leu Cys Ala Cys Glu Pro Gly Pro Met Gly Pro Pro Gly Pro Pro Gly Leu Pro Gly Arg Gln Gly Ser Lys Gly Asp Leu Gly Leu Pro Gly Trp Leu Gly Thr Lys Gly Asp Pro Gly Pro Pro Gly Ala Glu Gly Pro Pro Gly Leu Pro Gly Lys His Gly Ala Ser Gly Pro Pro Gly Asn Lys Gly Ala Lys Gly Asp Met Val Val Ser Arg Val Lys Gly His Lys Gly Glu Arg Gly Pro Asp Gly Pro Pro Gly Phe Pro Gly Gln Pro Gly Ser His Gly Arg Asp Gly His Ala Gly Glu Lys Gly Asp Pro Gly Pro Pro Gly Asp His Glu Asp Ala Thr Pro Gly Gly Lys Gly Phe Pro Gly Pro Leu Gly Pro Pro Gly Lys Ala Gly Pro Val Gly Pro Pro Gly Leu Gly Phe Pro Gly Pro Pro Gly Glu Arg Gly His Pro Gly Val Pro Gly His Pro Gly Val Arg Gly Pro Asp Gly Leu Lys Gly Gln Lys Gly Asp Thr Ile Ser Cys Asn Val Thr Tyr

Pro Gly Arg His Gly Pro Pro Gly Phe Asp Gly Pro Pro Gly Pro Lys 680 Gly Phe Pro Gly Pro Gln Gly Ala Pro Gly Leu Ser Gly Ser Asp Gly 695 700 His Lys Gly Arg Pro Gly Thr Pro Gly Thr Ala Glu Ile Pro Gly Pro 710 715 Pro Gly Phe Arg Gly Asp Met Gly Asp Pro Gly Phe Gly Glu Lys 725 730 Gly Ser Ser Pro Val Gly Pro Pro Gly Pro Pro Gly Ser Pro Gly Val 745 750 Asn Gly Gln Lys Gly Ile Pro Gly Asp Pro Ala Phe Gly His Leu Gly 755 760 765 Pro Pro Gly Lys Arg Gly Leu Ser Gly Val Pro Gly Ile Lys Gly Pro 775 Arg Gly Asp Pro Gly Cys Pro Gly Ala Glu Gly Pro Ala Gly Ile Pro 790 795 Gly Phe Leu Gly Leu Lys Gly Pro Lys Gly Arg Glu Gly His Ala Gly 810 . 815 805 Phe Pro Gly Val Pro Gly Pro Pro Gly His Ser Cys Glu Arg Gly Ala 825 830 Pro Gly Ile Pro Gly Gln Pro Gly Leu Pro Gly Tyr Pro Gly Ser Pro 840 835 845 Gly Ala Pro Gly Gly Lys Gly Gln Pro Gly Asp Val Gly Pro Pro Gly 855 860 Pro Ala Gly Met Lys Gly Leu Pro Gly Leu Pro Gly Arg Pro Gly Ala 870 875 His Gly Pro Pro Gly Leu Pro Gly Ile Pro Gly Pro Phe Gly Asp Asp 885 890 895 Gly Leu Pro Gly Pro Pro Gly Pro Lys Gly Pro Arg Gly Leu Pro Gly 900 905 Phe Pro Gly Phe Pro Gly Glu Arg Gly Lys Pro Gly Ala Glu Gly Cys 915 920 925 Pro Gly Ala Lys Gly Glu Pro Gly Glu Lys Gly Met Ser Gly Leu Pro 935 940 Gly Asp Arg Gly Leu Arg Gly Ala Lys Gly Ala Ile Gly Pro Pro Gly 950 955 Asp Glu Gly Glu Met Ala Ile Ile Ser Gln Lys Gly Thr Pro Gly Glu 965 970 Pro Gly Pro Pro Gly Asp Asp Gly Phe Pro Gly Glu Arg Gly Asp Lys 980 985 Gly Thr Pro Gly Met Gln Gly Arg Arg Gly Glu Leu Gly Arg Tyr Gly 995 1000 1005 Pro Pro Gly Phe His Arg Gly Glu Pro Gly Glu Lys Gly Gln Pro Gly 1015 1020 Pro Pro Gly Pro Pro Gly Pro Pro Gly Ser Thr Gly Leu Arg Gly Phe 1030 1035 Ile Gly Phe Pro Gly Leu Pro Gly Asp Gln Gly Glu Pro Gly Ser Pro 1045 1050 Gly Pro Pro Gly Phe Ser Gly Ile Asp Gly Ala Arg Gly Pro Lys Gly 1060 1065 1070 Asn Lys Gly Asp Pro Ala Ser His Phe Gly Pro Pro Gly Pro Lys Gly 1075 1080 1085 Glu Pro Gly Ser Pro Gly Cys Pro Gly His Phe Gly Ala Ser Gly Glu 1095 1100 Gln Gly Leu Pro Gly Ile Gln Gly Pro Arg Gly Ser Pro Gly Arg Pro 1105 1110 1115 1120 Gly Pro Pro Gly Ser Ser Gly Pro Pro Gly Cys Pro Gly Asp His Gly 1125 1130 Met Pro Gly Leu Arg Gly Gln Pro Gly Glu Met Gly Asp Pro Gly Pro

1140 1145 Arg Gly Leu Gln Gly Asp Pro Gly Ile Pro Gly Pro Pro Gly Ile Lys 1160 1165 Gly Pro Ser Gly Ser Pro Gly Leu Asn Gly Leu His Gly Leu Lys Gly 1170 1175 1180 Gln Lys Gly Thr Lys Gly Ala Ser Gly Leu His Asp Val Gly Pro Pro 1185 1190 1195 1200 Gly Pro Val Gly Ile Pro Gly Leu Lys Gly Glu Arg Gly Asp Pro Gly 1205 1210 1215 Ser Pro Gly Ile Ser Pro Pro Gly Pro Arg Gly Lys Lys Gly Pro Pro 1220 1225 1230 . Gly Pro Pro Gly Ser Ser Gly Pro Pro Gly Pro Ala Gly Ala Thr Gly 1235 1240 1245 Arg Ala Pro Lys Asp Ile Pro Asp Pro Gly Pro Pro Gly Asp Gln Gly 1255 1260 Pro Pro Gly Pro Asp Gly Pro Arg Gly Ala Pro Gly Pro Pro Gly Leu 1270 1275 Pro Gly Ser Val Asp Leu Leu Arg Gly Glu Pro Gly Asp Cys Gly Leu 1285 1290 1295 Pro Gly Pro Pro Gly Pro Pro Gly Pro Pro Pro Gly Tyr Lys 1300 1305 1310 Gly Phe Pro Gly Cys Asp Gly Lys Asp Gly Gln Lys Gly Pro Val Gly 1315 1320 1325 Phe Pro Gly Pro Gln Gly Pro His Gly Phe Pro Gly Pro Pro Gly Glu 1330 1335 1340 Lys Gly Leu Pro Gly Pro Pro Gly Arg Lys Gly Pro Thr Gly Leu Pro 1345 1350 1355 1360 Gly Pro Arg Gly Glu Pro Gly Pro Pro Ala Asp Val Asp Asp Cys Pro 1365 1370 1375 Arg Ile Pro Gly Leu Pro Gly Ala Pro Gly Met Arg Gly Pro Glu Gly 1380 1385 1390 Ala Met Gly Leu Pro Gly Met Arg Gly Pro Ser Gly Pro Gly Cys Lys 1400 1405 Gly Glu Pro Gly Leu Asp Gly Arg Arg Gly Val Asp Gly Val Pro Gly 1415 1420 Ser Pro Gly Pro Pro Gly Arg Lys Gly Asp Thr Gly Glu Asp Gly Tyr 1425 · 1430 1435 Pro Gly Gly Pro Gly Pro Gly Pro Ile Gly Asp Pro Gly Pro Lys 1445 1450 1455 Gly Phe Gly Pro Gly Tyr Leu Gly Gly Phe Leu Leu Val Leu His Ser 1460 1465 1470 Gln Thr Asp Gln Glu Pro Thr Cys Pro Leu Gly Met Pro Arg Leu Trp 1475 1480 1485 Thr Gly Tyr Ser Leu Leu Tyr Leu Glu Gly Gln Glu Lys Ala His Asn 1490 1495 1500 Gln Asp Leu Gly Leu Ala Gly Ser Cys Leu Pro Val Phe Ser Thr Leu 1510 1515 1520 Pro Phe Ala Tyr Cys Asn Ile His Gln Val Cys His Tyr Ala Gln Arg 1535 1525 1530 Asn Asp Arg Ser Tyr Trp Leu Ala Ser Ala Ala Pro Leu Pro Met Met 1540 1545 1550 Pro Leu Ser Glu Glu Ala Ile Arg Pro Tyr Val Ser Arg Cys Ala Val 1555 1560 1565 Cys Glu Ala Pro Ala Gln Ala Val Ala Val His Ser Gln Asp Gln Ser 1570 1575 1580 Ile Pro Pro Cys Pro Gln Thr Trp Arg Ser Leu Trp Ile Gly Tyr Ser 1585 1590 1595 Phe Leu Met His Thr Gly Ala Gly Asp Gln Gly Gly Gln Ala Leu 1605 1610

 Met Ser Pro Gly Ser Cys
 Leu Glu Asp Phe Arg Ala Ala Pro Phe Leu 1620
 1630

 Glu Cys Gln Gly Arg Gln Gly Thr Cys His Phe Phe Ala Asn Lys Tyr 1635
 1640
 1645

 Ser Phe Trp Leu Thr Thr Val Lys Ala Asp Phe Glu Phe Ser Ser Ala 1650
 1655
 1660

 Pro Ala Pro Asp Thr Leu Lys Glu Ser Gln Ala Gln Arg Gln Lys Ile 1665
 1670
 1675
 1680

 Ser Arg Cys Gln Val Cys Val Lys Tyr Ser *
 1690

<210> 1442 <211> 153 <212> PRT <213> Homo sapiens

<400> 1442 Met Gly Val Met Ala Pro Arg Thr Leu Leu Leu Leu Leu Gly Ala 5 10 Leu Ala Leu Thr Glu Thr Trp Ala Gly Glu Cys Gly Val Gly Arg Glu 20 25 Arg Ala Ser Ala Gly Arg Ser Glu Trp Pro Ala Arg Pro Gly Glu Pro 35 40 Arg Arg Glu Glu Gly Arg Ala Gly Leu Ser Leu Ser Ser Pro Pro Gly 55 60 Ser His Ser Leu Arg Tyr Phe Ser Thr Ala Val Ser Gln Pro Gly Arg 75 70 Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr Val Asp Asp Thr Glu Phe 85 90 Val Arg Phe Asp Ser Asp Ser Val Ser Pro Arg Met Glu Arg Arg Ala 100 105 110 Pro Trp Val Glu Gln Glu Gly Leu Glu Tyr Trp Asp Gln Glu Thr Arg 115 120 125 Asn Ala Lys Gly His Ala Gln Ile Tyr Arg Val Asn Leu Arg Thr Leu 135

150 153

<210> 1443 <211> 58 <212> PRT <213> Homo sapiens

Leu Arg Tyr Tyr Asn Gln Ser Glu Ala

<210> 1444 <211> 69 <212> PRT <213> Homo sapiens

<210> 1445 <211> 826 <212> PRT <213> Homo sapiens

<400> 1445 Met Gly Trp Leu Cys Ser Gly Leu Leu Phe Pro Val Ser Cys Leu Val 1 5 Leu Leu Gln Val Ala Ser Ser Gly Asn Met Lys Val Leu Gln Glu Pro 20 25 Thr Cys Val Ser Asp Tyr Met Ser Ile Ser Thr Cys Glu Trp Lys Met 40 45 Asn Gly Pro Thr Asn Cys Ser Thr Glu Leu Arg Leu Leu Tyr Gln Leu 55 60 Val Phe Leu Leu Ser Glu Ala His Thr Cys Val Pro Glu Asn Asn Gly 70 75 Gly Ala Gly Cys Val Cys His Leu Leu Met Asp Asp Val Val Ser Ala 85 90 Asp Asn Tyr Thr Leu Asp Leu Trp Ala Gly Gln Gln Leu Leu Trp Lys 100 105 110 Gly Ser Phe Lys Pro Ser Glu His Val Lys Pro Arg Ala Pro Gly Asn 115 120 125 Leu Thr Val His Thr Asn Val Ser Asp Thr Leu Leu Leu Thr Trp Ser 135 140 Asn Pro Tyr Pro Pro Asp Asn Tyr Leu Tyr Asn His Leu Thr Tyr Ala 150 155 Val Asn Ile Trp Ser Glu Asn Asp Pro Ala Asp Phe Arg Ile Tyr Asn 165 170 175 Val Thr Tyr Leu Glu Pro Ser Leu Arg Ile Ala Ala Ser Thr Leu Lys 180 185 190 Ser Gly Ile Ser Tyr Arg Ala Arg Val Arg Ala Trp Ala Gln Cys Tyr 195 200 205 Asn Thr Thr Trp Ser Glu Trp Ser Pro Ser Thr Lys Trp His Asn Ser 215 220 Tyr Arg Glu Pro Phe Glu Gln His Leu Leu Leu Gly Val Ser Val Ser 230 235

Cys Ile Val Ile Leu Ala Val Cys Leu Leu Cys Tyr Val Ser Ile Thr Lys Ile Lys Lys Glu Trp Trp Asp Gln Ile Pro Asn Pro Ala Arg Ser Arg Leu Val Ala Ile Ile Ile Gln Asp Ala Gln Gly Ser Gln Trp Glu Lys Arg Ser Arg Gly Gln Glu Pro Ala Lys Cys Pro His Trp Lys Asn Cys Leu Thr Lys Leu Leu Pro Cys Phe Leu Glu His Asn Met Lys Arg Asp Glu Asp Pro His Lys Ala Ala Lys Glu Met Pro Phe Gln Gly Ser Gly Lys Ser Ala Trp Cys Pro Val Glu Ile Ser Lys Thr Val Leu Trp Pro Glu Ser Ile Ser Val Val Arg Cys Val Glu Leu Phe Glu Ala Pro Val Glu Cys Glu Glu Glu Glu Val Glu Glu Glu Lys Gly Ser Phe Cys Ala Ser Pro Glu Ser Ser Arg Asp Asp Phe Gln Glu Gly Arg Glu Gly Ile Val Ala Arg Leu Thr Glu Ser Leu Phe Leu Asp Leu Leu Gly Glu Glu Asn Gly Gly Phe Cys Gln Gln Asp Met Gly Glu Ser Cys Leu Leu Pro Pro Ser Gly Ser Thr Ser Ala His Met Pro Trp Asp Glu Phe Pro Ser Ala Gly Pro Lys Glu Ala Pro Pro Trp Gly Lys Glu Gln Pro Leu His Leu Glu Pro Ser Pro Pro Ala Ser Pro Thr Gln Ser Pro Asp Asn Leu Thr Cys Thr Glu Thr Pro Leu Val Ile Ala Gly Asn Pro Ala Tyr Arg Ser Phe Ser Asn Ser Leu Ser Gln Ser Pro Cys Pro Arg Glu Leu Gly Pro Asp Pro Leu Leu Ala Arg His Leu Glu Glu Val Glu Pro Glu Met Pro Cys Val Pro Gln Leu Ser Glu Pro Thr Thr Val Pro Gln Pro Glu Pro Glu Thr Trp Glu Gln Ile Leu Arg Arg Asn Val Leu Gln His Gly Ala Ala Ala Pro Val Ser Ala Pro Thr Ser Gly Tyr Gln . 565 Glu Phe Val His Ala Val Glu Gln Gly Gly Thr Gln Ala Ser Ala Val Val Gly Leu Gly Pro Pro Gly Glu Ala Gly Tyr Lys Ala Phe Ser Ser Leu Leu Ala Ser Ser Ala Val Ser Pro Glu Lys Cys Gly Phe Gly Ala Ser Ser Gly Glu Glu Gly Tyr Lys Pro Phe Gln Asp Leu Ile Pro Gly Cys Pro Gly Asp Pro Ala Pro Val Pro Leu Phe Thr Phe Gly Leu Asp Arg Glu Pro Pro Arg Ser Pro Gln Ser Ser His Leu Pro Ser Ser Ser Pro Glu His Leu Gly Leu Glu Pro Gly Glu Lys Val Glu Asp Met Pro Lys Pro Pro Leu Pro Gln Glu Gln Ala Thr Asp Pro Leu Val Asp Ser Leu Gly Ser Gly Ile Val Tyr Ser Ala Leu Thr Cys His Leu

705 710 Cys Gly His Leu Lys Gln Cys His Gly Gln Glu Asp Gly Gln Thr 725 730 Pro Val Met Ala Ser Pro Cys Cys Gly Cys Cys Cys Gly Asp Arg Ala 740 745 Ser Pro Pro Thr Thr Pro Leu Arg Ala Pro Asp Pro Ser Pro Gly Gly 760 Val Pro Leu Glu Ala Ser Leu Cys Pro Ala Ser Leu Ala Pro Ser Gly 775 Ile Ser Glu Lys Ser Lys Ser Ser Ser Ser Phe His Pro Ala Pro Gly 790 795 Asn Ala Gln Ser Ser Ser Gln Thr Pro Lys Ile Val Asn Phe Val Ser 805 810 Val Gly Pro Thr Tyr Met Arg Val Ser *

<210> 1446 <211> 367 <212> PRT <213> Homo sapiens

<400> 1446 Met Ala Leu Arg Phe Leu Leu Gly Phe Leu Leu Ala Gly Val Asp Leu 10 Gly Val Tyr Leu Met Arg Leu Glu Leu Cys Asp Pro Thr Gln Arg Leu 25 Arg Val Ala Leu Ala Gly Glu Leu Val Gly Val Gly Gly His Phe Leu 40 45 Phe Leu Gly Leu Ala Leu Val Ser Lys Asp Trp Arg Phe Leu Gln Arg 55 Met Ile Thr Ala Pro Cys Ile Leu Phe Leu Phe Tyr Gly Trp Pro Gly 70 Leu Phe Leu Glu Ser Ala Arg Trp Leu Ile Val Lys Arg Gln Ile Glu 85 90 Glu Ala Gln Ser Val Leu Arg Ile Leu Ala Glu Arg Asn Arg Pro His 105 110 Gly Gln Met Leu Gly Glu Glu Ala Gln Glu Ala Leu Gln Asp Leu Glu 120 125 Asn Thr Cys Pro Leu Pro Ala Thr Ser Ser Phe Ser Phe Ala Ser Leu 135 140 Leu Asn Tyr Arg Asn Ile Trp Lys Asn Leu Leu Ile Leu Gly Phe Thr 155 150 Asn Phe Ile Ala His Ala Ile Arg His Cys Tyr Gln Pro Val Gly Gly 165 170 Gly Gly Ser Pro Ser Asp Phe Tyr Leu Cys Ser Leu Leu Ala Ser Gly 180 185 Thr Ala Ala Leu Ala Cys Val Phe Leu Gly Val Thr Val Asp Arg Phe 195 200 205 Gly Arg Arg Gly Ile Leu Leu Ser Met Thr Leu Thr Gly Ile Ala 215 220 Ser Leu Val Leu Leu Gly Leu Trp Asp Tyr Leu Asn Glu Ala Ala Ile 230 235 Thr Thr Phe Ser Val Leu Gly Leu Phe Ser Ser Gln Ala Ala Ile 245 250 Leu Ser Thr Leu Leu Ala Ala Glu Val Ile Pro Thr Thr Val Arg Gly 265

Arg Gly Leu Gly Leu Ile Met Ala Leu Gly Ala Leu Gly Gly Leu Ser 280 . 285 Gly Pro Ala Gln Arg Leu His Met Gly His Gly Ala Phe Leu Gln His 295 Val Val Leu Ala Ala Cys Ala Leu Leu Cys Ile Leu Ser Ile Met Leu 310 315 Leu Pro Glu Thr Lys Arg Lys Leu Leu Pro Glu Val Leu Arg Asp Gly 325 330 335 Glu Leu Cys Arg Arg Pro Ser Leu Leu Arg Gln Pro Pro Pro Thr Arg 345 Cys Asp His Val Pro Leu Leu Ala Thr Pro Asn Pro Ala Leu 360

<210> 1447 <211> 79 <212> PRT <213> Homo sapiens

<400> 1447 Met Ala Ile Ser Trp Leu Gly Thr Trp Leu Leu Gln Ser His Arg His 10 Trp Ser Glu Pro Gln Leu Cys Arg Leu Pro Ala Arg His His Leu Ile 20 25 Asn Leu Asn Phe Met Val Ala Glu Gly Ile Gly Asp Arg Ala Trp His 40 Ile Ile Ser Ala Gln Leu Phe Met Thr Phe Ser Phe His Ala Val Ile 55 60 Leu Gln Thr Asp Leu Gly Glu Ala Gly Lys Tyr Lys Asp Lys 🔹

<210> 1448 <211> 276 <212> PRT

<213> Homo sapiens

<400> 1448 Met Val Trp Val Val Leu Leu Ser Leu Leu Cys Tyr Leu Val Leu Phe 5 10 Leu Cys Arg His Ser Ser His Arg Gly Val Phe Leu Ser Val Thr Ile 20 25 Leu Ile Tyr Leu Leu Met Gly Glu Met His Met Val Asp Thr Val Thr Trp His Lys Met Arg Gly Ala Gln Met Ile Val Ala Met Lys Ala Val 60 Ser Leu Gly Phe Asp Leu Asp Arg Gly Glu Val Gly Thr Val Pro Ser 70 Pro Val Glu Phe Met Gly Tyr Leu Tyr Phe Val Gly Thr Ile Val Phe 85 90 Gly Pro Trp Ile Ser Phe His Ser Tyr Leu Gln Ala Val Gln Gly Arg 105 Pro Leu Ser Cys Arg Trp Leu Gln Lys Val Ala Arg Ser Leu Ala Leu 115 120 Ala Leu Leu Cys Leu Val Leu Ser Thr Cys Val Gly Pro Tyr Leu Phe

130 135 Pro Tyr Phe Ile Pro Leu Asn Gly Asp Arg Leu Leu Arg Lys Trp Leu 150 155 . 160 Arg Ala Tyr Glu Ser Ala Val Ser Phe His Phe Ser Asn Tyr Phe Val 165 170 Gly Phe Leu Ser Glu Ala Thr Ala Thr Leu Ala Gly Ala Gly Phe Thr 180 185 Glu Glu Lys Asp His Leu Glu Trp Asp Leu Thr Val Ser Lys Pro Leu 195 200 Asn Val Glu Leu Pro Arg Ser Met Val Glu Val Val Thr Ser Trp Asn 215 220 Leu Pro Met Ser Tyr Trp Leu Asn Asn Tyr Gly Phe Lys Asn Ala Leu 230 235 Arg Leu Gly Thr Leu Leu Gly Cys Ala Gly His Leu Cys Ser Gln Arg 245 250 Pro Ser Lys Leu Leu Lys Phe Pro Pro Gly Trp Gly Pro Cys Cys Pro 260 265 Gly Phe Leu * 275

<210> 1449 <211> 597 <212> PRT <213> Homo sapiens

<400> 1449 Met Glu Phe Gly Leu Ser Trp Val Phe Leu Val Ala Ile Leu Lys Gly 5 10 Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Leu Val Gln 20 25 Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe 3.5 40 Ser Ser Tyr Trp Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 55 Val Trp Val Ser Arg Ile Asn Thr Asp Gly Ser Ser Thr Ser Tyr Ala 70 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn 90 Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val 100 105 Tyr Tyr Cys Ala Arg Ala Asp Asn Cys Ser Ser Thr Ser Cys Tyr Lys 115 120 125 Cys Phe Asp Tyr Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser Gly 135 140 Ser Ala Ser Ala Pro Thr Leu Phe Pro Leu Val Ser Cys Glu Asn Ser 150 155 Pro Ser Asp Thr Ser Ser Val Ala Val Gly Cys Leu Ala Gln Asp Phe 170 175 Leu Pro Asp Ser Ile Thr Phe Ser Trp Lys Tyr Lys Asn Asn Ser Asp 180 185 190 Ile Ser Ser Thr Arg Gly Phe Pro Ser Val Leu Arg Gly Gly Lys Tyr 195 200 205 Ala Ala Thr Ser Gln Val Leu Leu Pro Ser Lys Asp Val Met Gln Gly 215 220 Thr Asp Glu His Val Val Cys Lys Val Gln His Pro Asn Gly Asn Lys 235

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Glu Lys Asn Val Pro Leu Pro Val Ile Ala Glu Leu Pro Pro Lys Val
               245
                                 250
Ser Val Phe Val Pro Pro Arg Asp Gly Phe Phe Gly Asn Pro Arg Lys
         260
                              265
Ser Lys Leu Ile Cys Gln Ala Thr Gly Phe Ser Pro Arg Gln Ile Gln
                          280
Val Ser Trp Leu Arg Glu Gly Lys Gln Val Gly Ser Gly Val Thr Thr
                      295
                                         300
Asp Gln Val Gln Ala Glu Ala Lys Glu Ser Gly Pro Thr Thr Tyr Lys
                        315
                 310
Val Thr Ser Thr Leu Thr Ile Lys Glu Ser Asp Trp Leu Ser Gln Ser
              325
                                 330
Met Phe Thr Cys Arg Val Asp His Arg Gly Leu Thr Phe Gln Gln Asn
        340
                              345
Ala Ser Ser Met Cys Val Pro Asp Gln Asp Thr Ala Ile Arg Val Phe
      355
                          360
Ala Ile Pro Pro Ser Phe Ala Ser Ile Phe Leu Thr Lys Ser Thr Lys
                       375
                                      380
Leu Thr Cys Leu Val Thr Asp Leu Thr Thr Tyr Asp Ser Val Thr Ile
                 390
                                  395
Ser Trp Thr Arg Gln Asn Gly Glu Ala Val Lys Thr His Thr Asn Ile
              405
                                 410
Ser Glu Ser His Pro Asn Ala Thr Phe Ser Ala Val Gly Glu Ala Ser
          420
                              425
Ile Cys Glu Asp Asp Trp Asn Ser Gly Glu Arg Phe Thr Cys Thr Val
       435
                         440
                                            445
Thr His Thr Asp Leu Pro Ser Pro Leu Lys Gln Thr Ile Ser Arg Pro
              455
Lys Gly Val Ala Leu His Arg Pro Asp Val Tyr Leu Leu Pro Pro Ala
                 470
                                    475
Arg Glu Gln Leu Asn Leu Arg Glu Ser Ala Thr Ile Thr Cys Leu Val
              485
                                 490
Thr Gly Phe Ser Pro Ala Asp Val Phe Val Gln Trp Met Gln Arg Gly
          500
                           505
Gln Pro Leu Ser Pro Glu Lys Tyr Val Thr Ser Ala Pro Met Pro Glu
                                  525
                       520
Pro Gln Ala Pro Gly Arg Tyr Phe Ala His Ser Ile Leu Thr Val Ser
                      535
                                        540
Glu Glu Glu Trp Asn Thr Gly Glu Thr Tyr Thr Cys Val Val Ala His
                550
                                    555
Glu Ala Leu Pro Asn Arg Val Thr Glu Arg Thr Val Asp Lys Ser Thr
            565
                                 570
Gly Lys Pro Thr Leu Tyr Asn Val Ser Leu Val Met Ser Asp Thr Ala
          580
                             585
Gly Thr Cys Tyr *
       595 596
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<210> 1450 <211> 276 <212> PRT <213> Homo sapiens

<400> 1450

Met Pro Ala Leu Arg Pro Ala Leu Leu Trp Ala Leu Leu Ala Leu Trp 1 5 10 15 Leu Cys Cys Ala Thr Pro Ala His Ala Leu Gln Cys Arg Asp Gly Tyr

25 Glu Pro Cys Val Asn Glu Gly Met Cys Val Thr Tyr His Asn Gly Thr 40 Gly Tyr Cys Lys Cys Pro Glu Gly Phe Leu Gly Glu Tyr Cys Gln His 55 Arg Asp Pro Cys Glu Lys Asn Arg Cys Gln Asn Gly Gly Thr Cys Val 70 Ala Gln Ala Met Leu Gly Lys Ala Thr Cys Arg Cys Ala Ser Gly Phe 90 Thr Gly Glu Asp Cys Gln Tyr Ser Thr Ser His Pro Cys Phe Val Ser 105 110 Arg Pro Cys Leu Asn Gly Gly Thr Cys His Met Leu Ser Arg Asp Thr 115 120 Tyr Glu Cys Thr Cys Gln Val Gly Phe Thr Gly Lys Glu Cys Gln Trp 135 140 Thr Asp Ala Cys Leu Ser His Pro Cys Ala Asn Gly Ser Thr Cys Thr 150 155 Thr Val Ala Asn Gln Phe Ser Cys Lys Cys Leu Thr Gly Phe Thr Gly 165 170 Gln Lys Cys Glu Thr Asp Val Asn Glu Cys Asp Ile Pro Gly His Cys 180 185 190 Gln His Gly Gly Ile Cys Leu Asn Leu Pro Gly Ser Tyr Gln Cys Gln 195 200 205 Cys Leu Gln Gly Phe Thr Gly Gln Tyr Cys Asp Ser Leu Tyr Val Pro 215 220 Cys Ala Pro Ser Pro Cys Val Asn Gly Gly Thr Cys Arg Gln Thr Gly 230 235 Asp Phe Thr Phe Glu Cys Asn Cys Leu Pro Glu Thr Val Arg Arg Gly . 245 250 Thr Glu Leu Trp Glu Arg Asp Arg Glu Val Trp Asn Gly Lys Glu His 265 Asp Glu Asn * 275

<210> 1451 <211> 121 <212> PRT <213> Homo sapiens

<400> 1451 Met Glu Ser Gly Leu Ser Trp Ile Phe Leu Leu Ala Ile Leu Lys Gly
1 5 10 15 Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Arg Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Arg Phe Asp Glu Tyr Gly Met His Trp Val Arg Gln Ala Pro Gly Lys Gly Leu 55 Glu Trp Val Gly Gly Ile Ser Trp Asn Arg Asp Ser Ile Ala Tyr Ala 70 75 Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Gln Ser 90 85 Tyr Val Tyr Leu Gln Met Asn Ser Leu Arg His Glu Asp Thr Ala Leu 100 105 Tyr Tyr Cys Thr Lys Leu Arg Ser Ser 120 121

<210> 1452 <211> 48 <212> PRT <213> Homo sapiens

<210> 1453 <211> 123 <212> PRT <213> Homo sapiens

<400> 1453 Met Ile Thr Val Gln Phe Ser Tyr Thr Ala Val Lys Trp Leu Leu Asn 1 5 10 Cys Phe Val Leu Ile Leu Tyr Val Ile Leu Ser Ile Leu Phe Gln Val 20 25 Ser Gln Lys Asn Ser Ser Lys Leu Gly Arg Phe Lys Asn Leu Phe Asn 40 His Lys Glu Cys Ser Lys Leu Leu Phe Asn Arg Asn Gln Ala Gln Thr 60 Leu Glu Leu Thr Ala Asp Arg Ile Arg Phe Gly Leu Phe Pro Glu Trp 65 70 Lys His Phe Ser His Thr Thr Ser Leu Cys Thr Ala Lys Met Leu Ala 85 90 Tyr Pro Leu Trp Phe Pro Ser Phe Ser Leu Ala Ser Gln Arg Asn Leu 100 105 Pro Pro His Pro Leu Tyr Tyr Ile Phe Tyr * 115 120

<210> 1454 <211> 327 <212> PRT <213> Homo sapiens

50 Leu Leu His Gly Phe Pro Thr Ser Ser Tyr Asp Trp Tyr Lys Ile Trp 75 70 Glu Gly Leu Thr Leu Arg Phe His Arg Val Ile Ala Leu Asp Phe Leu 8.5 90 Gly Phe Gly Phe Ser Asp Lys Pro Arg Pro His His Tyr Ser Ile Phe 100 105 110 Glu Gln Ala Ser Ile Val Glu Ala Leu Leu Arg His Leu Gly Leu Gln 120 125 Asn Arg Arg Ile Asn Leu Leu Ser His Asp Tyr Gly Asp Ile Val Ala 135 140 Gln Glu Leu Leu Tyr Arg Tyr Lys Gln Asn Arg Ser Gly Arg Leu Thr 150 155 Ile Lys Ser Leu Cys Leu Ser Asn Gly Gly Ile Phe Pro Glu Thr His 165 170 175 Arg Pro Leu Leu Gln Lys Leu Leu Lys Asp Gly Gly Val Leu Ser 180 185 190 Pro Ile Leu Thr Arg Leu Met Asn Phe Phe Val Phe Ser Arg Gly Leu 195 200 205 Thr Pro Val Phe Gly Pro Tyr Thr Arg Pro Ser Glu Ser Glu Leu Trp 215 220 Asp Met Trp Ala Gly Ile Arg Asn Asn Asp Gly Asn Leu Val Ile Asp 230 235 Ser Leu Leu Gln Tyr Ile Asn Gln Arg Lys Lys Phe Arg Arg Trp 245 250 Val Gly Ala Leu Ala Ser Val Thr Ile Pro Ile His Phe Ile Tyr Gly 265 Pro Leu Asp Pro Val Asn Pro Tyr Pro Glu Phe Leu Glu Leu Tyr Arg 275 280 285 Lys Thr Leu Pro Arg Ser Thr Val Ser Ile Leu Asp Asp His Ile Ser 295 300 His Tyr Pro Gln Leu Glu Asp Pro Met Gly Phe Leu Asn Ala Tyr Met 305 310 315 Gly Phe Ile Asn Ser Phe * 325 326

<210> 1455 <211> 57 <212> PRT <213> Homo sapiens

<210> 1456 <211> 48 <212> PRT

<213> Homo sapiens

<210> 1457 <211> 459 <212> PRT <213> Homo sapiens

<400> 1457 Met Ser Asp Leu Leu Ser Val Phe Leu His Leu Leu Leu Phe Lys 5 10 Leu Val Ala Pro Val Thr Phe Arg His His Arg Tyr Asp Asp Leu Val 20 25 Arg Thr Leu Tyr Lys Val Gln Asn Glu Cys Pro Gly Ile Thr Arg Val 40 Tyr Ser Ile Gly Arg Ser Val Glu Gly Arg His Leu Tyr Val Leu Glu 55 60 Phe Ser Asp His Pro Gly Ile His Glu Pro Leu Glu Pro Glu Val Lys 70 75 Tyr Val Gly Asn Met His Gly Asn Glu Ala Leu Gly Arg Glu Leu Met 85 90 Leu Gln Leu Ser Glu Phe Leu Cys Glu Glu Phe Arg Asn Arg Asn Gln 105 100 Arg Ile Val Gln Leu Ile Gln Asp Thr Arg Ile His Ile Leu Pro Ser 115 120 125 Met Asn Pro Asp Gly Tyr Glu Val Ala Ala Ala Gln Gly Pro Asn Lys 135 Pro Gly Tyr Leu Val Gly Arg Asn Asn Ala Asn Gly Val Asp Leu Asn 150 155 Arg Asn Phe Pro Asp Leu Asn Thr Tyr Ile Tyr Tyr Asn Glu Lys Tyr 165 170 Gly Gly Pro Asn His His Leu Pro Leu Pro Asp Asn Trp Lys Ser Gln 185 190 Val Glu Pro Glu Thr Arg Ala Val Ile Arg Trp Met His Ser Phe Asn 200 205 Phe Val Leu Ser Ala Asn Leu His Gly Gly Ala Val Val Ala Asn Tyr 215 220 Pro Tyr Asp Lys Ser Phe Glu His Arg Val Arg Gly Val Arg Arg Thr 230 235 Ala Ser Thr Pro Thr Pro Asp Asp Lys Leu Phe Gln Lys Leu Ala Lys 245 250 Val Tyr Ser Tyr Ala His Gly Trp Met Phe Gln Gly Trp Asn Cys Gly 260 Asp Tyr Phe Pro Asp Gly Ile Thr Asn Gly Ala Ser Trp Tyr Ser Leu Ser Lys Gly Met Gln Asp Phe Asn Tyr Leu His Thr Asn Cys Phe Glu 295 300 Ile Thr Leu Glu Leu Ser Cys Asp Lys Phe Pro Pro Glu Glu Glu Leu

Gln Arg Glu Trp Leu Gly Asn Arg Glu Ala Leu Ile Gln Phe Leu Glu Gln Val His Gln Gly Ile Lys Gly Met Val Leu Asp Glu Asn Tyr Asn Asn Leu Ala Asn Ala Val Ile Ser Val Ser Gly Ile Asn His Asp Val Thr Ser Gly Asp His Gly Asp Tyr Phe Arg Leu Leu Pro Gly Ile Tyr Thr Val Ser Ala Thr Ala Pro Gly Tyr Asp Pro Glu Thr Val Thr 390 395 Val Thr Val Gly Pro Ala Glu Pro Thr Leu Val Asn Phe His Leu Lys Arg Ser Ile Pro Gln Val Ser Pro Val Arg Arg Ala Pro Ser Arg Arg His Gly Val Arg Ala Lys Val Gln Pro Gln Pro Arg Lys Lys Glu Met Glu Met Arg Gln Leu Gln Arg Gly Pro Ala

<210> 1458 <211> 463 <212> PRT <213> Homo sapiens

<400> 1458 Met Ala Arg Val Leu Gly Ala Pro Val Ala Leu Gly Leu Trp Ser Leu Cys Trp Ser Leu Ala Ile Ala Thr Pro Leu Pro Pro Thr Ser Ala His Gly Asn Val Ala Glu Gly Glu Thr Lys Pro Asp Pro Asp Val Thr Glu Arg Cys Ser Asp Gly Trp Ser Phe Asp Ala Thr Thr Leu Asp Asp Asn Gly Thr Met Leu Phe Phe Lys Gly Glu Phe Val Trp Lys Ser His Lys Trp Asp Arg Glu Leu Ile Ser Glu Arg Trp Lys Asn Phe Pro Ser Pro Val Asp Ala Ala Phe Arg Gln Gly His Asn Ser Val Phe Leu Ile Lys Gly Asp Lys Val Trp Val Tyr Pro Pro Glu Lys Lys Glu Lys Gly Tyr Pro Lys Leu Leu Gln Asp Glu Phe Pro Gly Ile Pro Ser Pro Leu Asp Ala Ala Val Glu Cys His Arg Gly Glu Cys Gln Ala Glu Gly Val Leu Phe Phe Gln Gly Asp Arg Glu Trp Phe Trp Asp Leu Ala Thr Gly Thr Met Lys Glu Arg Ser Trp Pro Ala Val Gly Asn Cys Ser Ser Ala Leu Arg Trp Leu Gly Arg Tyr Tyr Cys Phe Gln Gly Asn Gln Phe Leu Arg Phe Asp Pro Val Arg Gly Glu Val Pro Pro Arg Tyr Pro Arg Asp Val Arg Asp Tyr Phe Met Pro Cys Pro Gly Arg Gly His Gly His Arg Asn

Gly Thr Gly His Gly Asn Ser Thr His His Gly Pro Glu Tyr Met Arg 245 250 Cys Ser Pro His Leu Val Leu Ser Ala Leu Thr Ser Asp Asn His Gly . 265 Ala Thr Tyr Ala Phe Ser Gly Thr His Tyr Trp Arg Leu Asp Thr Ser 275 280 Arg Asp Gly Trp His Ser Trp Pro Ile Ala His Gln Trp Pro Gln Gly 295 300 Pro Ser Ala Val Asp Ala Ala Phe Ser Trp Glu Glu Lys Leu Tyr Leu 310 315 Val Gln Gly Thr Gln Val Tyr Val Phe Leu Thr Lys Gly Gly Tyr Thr 330 335 Leu Val Ser Gly Tyr Pro Lys Arg Leu Glu Lys Glu Val Gly Thr Pro 340 345 His Gly Ile Ile Leu Asp Ser Val Asp Ala Ala Phe Ile Cys Pro Gly 360 Ser Ser Arg Leu His Ile Met Ala Gly Arg Arg Leu Trp Trp Leu Asp 375 380 Leu Lys Ser Gly Ala Gln Ala Thr Trp Thr Glu Leu Pro Trp Pro His 390 395 Glu Lys Val Asp Gly Ala Leu Cys Met Glu Lys Ser Leu Gly Pro Asn 405 410 Ser Cys Ser Ala Asn Gly Pro Gly Leu Tyr Leu Ile His Gly Pro Asn 420 425 430 Leu Tyr Cys Tyr Ser Asp Val Glu Lys Leu Asn Ala Ala Lys Ala Leu 435 440 445 Pro Gln Pro Gln Asn Val Thr Ser Leu Leu Gly Cys Thr His 455

<210> 1459 <211> 187 <212> PRT <213> Homo sapiens

<400> 1459 Met Gln Pro Ile Val Ala Lys Ala Leu Val Val Leu Leu Glu Val His 5 10 Pro Leu Gln Asp Gln Ala Glu Ser Gly Arg Leu Gly His Val His Leu 25 3.0 Leu Cys Ala Pro Ala Ala Leu Gln His Ala Leu Arg Gly Ile Thr Leu 40 His Asn Gly His His Gln Ala Asp His Leu Pro Asp Leu Met His His 55 Glu Ala Leu Ala Leu His Pro Asp His Arg Lys Leu Gln Ala Leu Pro 70 His Lys Gly Phe Leu Ala Val His Leu Gln Asp Val Ala Ala Gly Thr 85 90 Gly Ile Leu Arg Pro Leu Leu Arg Gly Glu Ile Val Glu Val Val Arg 100 105 110 Ala Leu Val Ala Gly Gln Glu Pro Val Asp Leu Leu Gln Arg Leu Gly 120 125 Ala Gln Ala Val Gly Leu Ile Leu Asn Val Pro Val Leu Val Arg Lys 135 140 Gly Lys Arg Gly Gln Gln Val Ala Ile Gly Pro Gly Ile Thr Ser Val 150 155 Leu Gly Val Lys Pro Ala Arg Asp Pro Leu Gln Ser Gln Asn Pro Asn

165 170 175 Val Arg Gly Lys Val Ala Val Asp Leu Phe * 180 185 186

<210> 1460 <211> 223 <212> PRT <213> Homo sapiens

<400> 1460 Met Lys Phe Ala Leu Phe Thr Ser Gly Val Ala Leu Thr Leu Ser Phe 10 Val Phe Met Tyr Ala Lys Cys Glu Asn Glu Pro Phe Ala Gly Val Ser 25 Glu Ser Tyr Asn Gly Thr Gly Glu Leu Gly Asn Leu Ile Ala Pro Cys 40 Asn Ala Asn Cys Asn Cys Ser Arg Ser Tyr Tyr Tyr Pro Val Cys Gly
50 55 60 Asp Gly Val Gln Tyr Phe Ser Pro Cys Phe Ala Gly Cys Ser Asn Pro 70 Val Ala His Arg Lys Pro Lys Val Tyr Tyr Asn Cys Ser Cys Ile Glu 85 Arg Lys Thr Glu Ile Thr Ser Thr Ala Glu Thr Phe Gly Phe Glu Ala 105 Asn Ala Gly Lys Cys Glu Thr His Cys Ala Lys Leu Ala Ile Phe Leu 115 120 125 Cys Ile Val Phe Ile Gly Asn Ile Phe Thr Phe Met Ala Arg Ser Pro 135 140 Ile Thr Gly Ala Ile Pro Arg Gly Gly Asn His Arg Gln Arg Pro Pro 150 155 Thr Leu Gly Ile Gln Phe Met Ala Leu Arg Thr Leu Trp Thr Thr Pro 165 170 Trp Pro Ser Lys Thr Gly Cys Pro Ile His Gln Pro Gly Ser Leu Trp 180 185 Glu Lys Leu Gly Trp Arg Pro Leu Lys Thr Leu Arg Arg Pro Lys Pro 195 200 205 Ser Trp Asn Ala Leu Leu Ala Leu Ala His Pro Arg Ser Phe Gln 215

<210> 1461 <211> 210 <212> PRT <213> Homo sapiens

Arg Val Val Pro Leu Asn Pro Ala Thr Lys Leu Ser Pro Leu Glu Ser 75 Gln Met Ala Leu His Thr Lys Ala Val Glu Ala Gly Met Val Phe Gly 85 90 His Arg Ala Glu His Lys Asp Pro Arg Ser Val Trp Glu Ser Tyr Trp 105 Leu Leu Gly Ser Pro Trp Ala Glu Val Thr Arg Leu His Pro Arg Arg 115 120 125 Ala Gln Leu Gly Ser Leu Pro Pro Pro Asp Pro Arg Thr Thr His Arg 135 140 Arg Gly Ala Val Ser Ile Phe Leu Lys Gly Pro Phe Gly Asp Leu Val 150 155 Leu Ser Val Glu Arg Thr Asp Val Ala Leu Ser Ser Gln His Ile Pro 165 170 Gly Ser Gly Arg Pro Gln Leu Lys Gln Cys Gln Gly Pro Gln Gly Ser 180 185 190 His Leu Asp Arg Pro Thr Ala Cys Asn Ser Ala Leu Leu Arg Arg Gln 200 His 209

<210> 1462 <211> 56 <212> PRT <213> Homo sapiens

<210> 1463 <211> 66 <212> PRT <213> Homo sapiens

<210> 1464 <211> 200 <212> PRT <213> Homo sapiens

<400> 1464 Met Val Trp Arg Arg Leu Leu Arg Lys Arg Trp Val Leu Ala Leu Val 10 Phe Gly Leu Ser Leu Val Tyr Phe Leu Ser Ser Thr Phe Lys Gln Glu 20 25 30 Glu Arg Ala Val Arg Asp Arg Asn Leu Leu Gln Val His Asp His Asn 35 40 45 Gln Pro Ile Pro Trp Lys Val Gln Phe Asn Leu Gly Asn Ser Ser Arg 55 60 Pro Ser Asn Gln Cys Arg Asn Ser Ile Gln Gly Lys His Leu Ile Thr 75 70 Asp Glu Leu Gly Tyr Val Cys Glu Arg Lys Asp Leu Leu Val Asn Gly 85 90 Cys Cys Asn Val Asn Val Pro Ser Thr Lys Gln Tyr Cys Cys Asp Gly 100 105 110 Cys Trp Pro Asn Gly Cys Cys Ser Ala Tyr Glu Tyr Cys Val Ser Cys 120 115 125 Cys Leu Gln Pro Asn Lys Gln Leu Leu Glu Arg Phe Leu Asn Arg 130 135 140 Ala Ala Val Ala Phe Gln Asn Leu Phe Met Ala Val Glu Asp His Phe 145 150 155 Glu Leu Cys Leu Ala Lys Cys Arg Thr Ser Ser Gln Ser Val Gln His 170 175 Glu Asn Thr Tyr Arg Asp Pro Ile Ala Lys Tyr Cys Tyr Gly Glu Ser 180 Pro Pro Glu Leu Phe Pro Ala 1.95 199

<210> 1465 <211> 46 <212> PRT <213> Homo sapiens

<210> 1466 <211> 56 <212> PRT <213> Homo sapiens

<210> 1467 <211> 366 <212> PRT <213> Homo sapiens

<400> 1467 Met Arg Gly Gln Val Val Thr Leu Ile Leu Leu Leu Leu Leu Lys Val 10 Tyr Gln Gly Lys Gly Cys Gln Gly Ser Ala Asp His Val Val Ser Ile 25 Ser Gly Val Pro Leu Gln Leu Gln Pro Asn Ser Ile Gln Thr Lys Val 40 Asp Ser Ile Ala Trp Lys Lys Leu Leu Pro Ser Gln Asn Gly Phe His 55 His Ile Leu Lys Trp Glu Asn Gly Ser Leu Pro Ser Asn Thr Ser Asn 70 Asp Arg Phe Ser Phe Ile Val Lys Asn Leu Ser Leu Leu Ile Lys Ala 85 90 Ala Gln Gln Asp Ser Gly Leu Tyr Cys Leu Glu Val Thr Ser Ile 100 105 110 Ser Gly Lys Val Gln Thr Ala Thr Phe Gln Val Phe Val Phe Asp Lys 115 120 125 Val Glu Lys Pro Arg Leu Gln Gly Gln Gly Lys Ile Leu Asp Arg Gly 135 140 Arg Cys Gln Val Ala Leu Ser Cys Leu Val Ser Arg Asp Gly Asn Val 150 155 Ser Tyr Ala Trp Tyr Arg Gly Ser Lys Leu Ile Gln Thr Ala Gly Asn 165 170 175 Leu Thr Tyr Leu Asp Glu Glu Val Asp Ile Asn Gly Thr His Thr Tyr 180 185 190 Thr Cys Asn Val Ser Asn Pro Val Ser Trp Glu Ser His Thr Leu Asn 200 205 Leu Thr Gln Asp Cys Gln Asn Ala His Gln Glu Phe Arg Phe Trp Pro 215 220 Phe Leu Val Ile Ile Val Ile Leu Ser Ala Leu Phe Leu Gly Thr Leu 230 235 Ala Cys Phe Cys Val Trp Arg Arg Lys Arg Lys Glu Lys Gln Ser Glu 245 250 Thr Ser Pro Lys Glu Phe Leu Thr Ile Tyr Glu Asp Val Lys Asp Leu 260 265 Lys Thr Arg Arg Asn His Glu Gln Glu Gln Thr Phe Pro Gly Gly Gly 275 280 Ser Thr Ile Tyr Ser Met Ile Gln Ser Gln Ser Ser Ala Pro Thr Ser 295 Gln Glu Pro Ala Tyr Thr Leu Tyr Ser Leu Ile Gln Pro Ser Arg Lys

<210> 1468 <211> 57 <212> PRT <213> Homo sapiens

 <400> 1468

 Met
 Thr
 Asp
 Phe
 Phe
 Leu
 Cys
 Ile
 His
 Ser
 Phe
 Tyr
 Leu
 Cys
 Val
 Leu

 1
 5
 5
 6
 10
 10
 10
 10
 15
 15
 15

 Leu
 Gln
 Ala
 Ser
 Leu
 Asp
 Met
 Leu
 Ser
 Val
 Lys
 Ser
 Phe
 Ser
 Phe
 Lys
 Asp
 Cys

 Val
 Leu
 Met
 Lys
 Ala
 Lys
 Glu
 Lys
 Pro
 Asp
 Thr
 Thr
 Ser
 Cys

 His
 Leu
 Val
 Ile
 Asp
 Ser
 Thr
 Thr

<210> 1469 <211> 110 <212> PRT <213> Homo sapiens

<210> 1470 <211> 59 <212> PRT <213> Homo sapiens

<400> 1470

<210> 1471 <211> 123 <212> PRT <213> Homo sapiens

<400> 1471 Met Met His Phe Leu Thr Gly Gly Trp Lys Val Leu Phe Ala Cys Val 1 5 10 Pro Pro Thr Glu Tyr Cys His Gly Trp Ala Cys Phe Gly Val Ser Ile 20 25 Leu Val Ile Gly Leu Leu Thr Ala Leu Ile Gly Asp Leu Ala Ser His 35 40 Phe Gly Cys Thr Val Gly Leu Lys Asp Ser Val Asn Ala Val Val Phe 55 60 Val Ala Leu Gly Thr Ser Ile Pro Gly Asn Thr Leu Gly Asp Phe Gly 70 7.5 Gly Val Gly Ser Gln Met Ser Gln Ala Gly Ala Thr Gln Asp Pro Ala 85 90 Glu Met Arg His Val Arg Gln Gln Gly Gly Gly Ala Ala Gly Pro Val 100 105 Arg Arg Arg Val His Arg Glu Arg Asp Pro Leu 115 120

<210> 1472 <211> 316 <212> PRT <213> Homo sapiens

<400> 1472 Met Val Ser Ala Ser Gly Thr Ser Phe Phe Lys Gly Met Leu Leu Gly 10 Ser Ile Ser Trp Val Leu Ile Thr Met Phe Gly Gln Ile His Ile Arg 20 25 His Arg Gly Gln Thr Gln Asp His Glu His His His Leu Arg Pro Pro 35 Asn Arg Asn Asp Phe Leu Asn Thr Ser Lys Val Ile Leu Leu Glu Leu 55 60 Ser Lys Ser Ile Arg Val Phe Cys Ile Ile Phe Gly Glu Ser Glu Asp 70 75 Glu Ser Tyr Trp Ala Val Leu Lys Glu Thr Trp Thr Lys His Cys Asp 85 90 95 Lys Ala Glu Leu Tyr Asp Thr Lys Asn Asp Asn Leu Phe Asn Ile Glu 105 Ser Asn Asp Arg Trp Val Gln Met Arg Thr Ala Tyr Lys Tyr Val Phe

115 120 Glu Lys Asn Gly Asp Asn Tyr Asn Trp Phe Phe Leu Ala Leu Pro Thr 135 140 Thr Phe Ala Val Ile Glu Asn Leu Lys Tyr Leu Leu Phe Thr Arg Asp 145 150 155 Ala Ser Gln Pro Phe Tyr Leu Gly His Thr Val Ile Phe Gly Asp Leu 165 170 Glu Tyr Val Thr Val Glu Gly Gly Ile Val Leu Ser Arg Glu Leu Met 180 185 190 . Lys Arg Leu Asn Arg Leu Leu Asp Asn Ser Glu Thr Cys Ala Asp Gln 195 200 Ser Val Ile Trp Lys Leu Ser Glu Asp Lys Gln Leu Ala Ile Cys Leu 215 220 Lys Tyr Ala Gly Val His Ala Glu Asn Ala Glu Asp Tyr Glu Gly Arg 230 235 Asp Val Phe Asn Thr Lys Pro Ile Ala Gln Leu Ile Glu Glu Ala Leu 245 250 Ser Asn Asn Pro Gln Gln Val Val Glu Gly Cys Cys Ser Asp Met Ala 260 265 Ile Thr Phe Asn Gly Leu Thr Pro Gln Lys Met Glu Val Met Met Tyr 275 280 Gly Leu Tyr Arg Leu Arg Ala Phe Gly His Tyr Phe Asn Asp Thr Leu 295 Val Phe Leu Pro Pro Val Gly Ser Glu Asn Asp * 310

<210> 1473 <211> 65 <212> PRT <213> Homo sapiens

<210> 1474 <211> 55 <212> PRT <213> Homo sapiens

<210> 1475
<211> 128
<212> PRT
<213> Homo sapiens
<221> misc_feature
<222> (1) ... (128)
<223> Xaa = any amino acid or nothing

<400> 1475 Met Lys Phe Gln Leu Phe Leu Ser Tyr Val Phe Ile Thr Gln Val Phe 1 5 10 Ser Arg Pro Phe Gln Ser Asn Leu Gly Ser Leu Thr Pro Ala Ser Ser 20 25 Gln Ile Pro Leu Gln Leu Pro Lys Ala Leu Cys Val Arg Cys Leu Asn 35 40 4.5 Thr Val Xaa Xaa Xaa Xaa Thr Gly Phe Gly Lys Phe Gln Ile Thr 55 60 Ile Gln Ser Pro Gly Gly Pro Leu Val Leu Ala Arg Pro Trp Ala Ser 70 75 Lys Phe Pro Ser Pro Lys Phe Xaa Xaa Xaa Xaa Xaa Aaa Pro Lys Met 85 90 Gly Gly Lys Thr Phe Ala Tyr Gly Arg Ile Asn Pro Thr Arg Pro Ala 100 105 110 Lys Asn Xaa Xaa Xaa Xaa Xaa Ser Leu Ala Ser Leu Asn Pro Thr 120

<210> 1476 <211> 210 <212> PRT <213> Homo sapiens

<400> 1476

Met Tyr Phe Phe Leu Leu Leu Phe Phe Asn Val Gln Arg Leu Ala 5 10 Phe Pro Phe Gly Ile Pro Asn Asp Pro Met Leu Trp Ser Glu Gly Gln 20 25 30 Ser His Leu Cys Trp Arg Ser Pro Leu Ile Pro Ser Ala Gln Phe Arg 35 40 4.5 Gly Ser Arg Ala Asp Ile Arg Gly Ser Met Leu His Ser Ser Ser Gly 55 60 Arg Val Val Pro Leu Asn Pro Ala Thr Lys Leu Ser Pro Leu Glu Ser 65 75 Gln Met Ala Leu His Thr Lys Ala Val Glu Ala Gly Met Val Phe Gly 85 90 His Arg Ala Glu His Lys Asp Pro Arg Ser Val Trp Glu Ser Tyr Trp

100 105 110 Leu Leu Gly Ser Pro Trp Ala Glu Val Thr Arg Leu His Pro Arg Arg 115 120 125 Ala Gln Leu Gly Ser Leu Pro Pro Pro Asp Pro Arg Thr Thr His Arg 135 1.40 Arg Gly Ala Val Ser Ile Phe Leu Lys Gly Pro Phe Gly Asp Leu Val 150 155 Leu Ser Val Glu Arg Thr Asp Val Ala Leu Ser Ser Gln His Ile Pro 170 165 Gly Ser Gly Arg Pro Gln Leu Lys Gln Cys Gln Gly Pro Gln Gly Ser 190 180 185 His Leu Asp Arg Pro Thr Ala Cys Asn Ser Ala Leu Leu Arg Arg Gln 200 His 209

<210> 1477 <211> 57 <212> PRT <213> Homo sapiens

<210> 1478 <211> 97 <212> PRT <213> Homo sapiens

<400> 1478 Met Arg Ile Trp Ser Arg Ala Val Gly Asp Gly Pro Ala Ala Val Cys 10 Cys Pro Leu Arg Ser Trp Cys Leu Leu Leu Trp Ala Leu Asp Ser Leu 20 25 Asp Pro Ala Ala Val Thr Thr His Ala Ser Ala Met Leu Ser Gly Val 40 Phe Thr Pro Pro Phe Val Ser Ala Leu Pro Val Gln Trp Met Gln Met 55 60 Pro Val Leu Ser Phe Leu Ser Leu Thr Gly Ser Ser Val Tyr Val His 70 75 Met Ala Leu Leu Ser Gly His Gln Gly Ser Asp Thr Cys Ser Gly Leu . 90

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<210> 1479
<211> 113
<212> PRT
<213> Homo sapiens
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<400> 1479 Met Leu Ser Ile Ser Tyr Phe Ser Asn Ser Leu Met Leu Arg Leu Val 1 5 10 Pro Leu Ala Ala Tyr Val Leu Ser Tyr Leu Ile Cys Ser Val Leu Leu 20 25 30 His Ile Asn Gln Thr Thr Val Thr Thr Tyr Arg Gly Arg Lys Gln Arg 35 40 45 Lys Lys Ile Gln Phe Ala Thr Gly Asn His Gln Ser Ala Gln Ser Tyr 55 60 Ser Glu Leu Leu Ser Leu Ser Leu Ser Phe Ser Ser Leu Leu Ser Pro 65 70 Val Phe Ser Leu Pro Ser Trp Ser Leu Pro Ser Leu Pro Pro Phe Phe 85 90 Ser His Ser Pro His Gln Lys Gly Ile Met Met Val Pro Arg Ser Val 110 112

<210> 1480 <211> 91 <212> PRT <213> Homo sapiens

<400> 1480 Met Arg Leu Ser Val Cys Leu Leu Leu Leu Thr Leu Ala Leu Cys Cys 1 5 10 Tyr Arg Ala Asn Ala Val Val Cys Gln Ala Leu Gly Ser Glu Ile Thr 20 25 Gly Phe Leu Leu Ala Gly Lys Pro Val Phe Lys Phe Gln Leu Ala Lys 35 4.5 Phe Lys Ala Pro Leu Glu Ala Val Ala Ala Lys Met Glu Val Lys Lys 55 60 Cys Val Asp Thr Met Ala Tyr Glu Lys Arg Val Leu Ile Thr Lys Thr 65 70 75 Leu Gly Lys Ile Ala Glu Lys Cys Asp Arg

<210> 1481 <211> 54 <212> PRT <213> Homo sapiens

20 25 Phe Leu Ser Leu Arg Leu Glu Thr Leu Thr Phe Phe Val Leu Trp Leu 35 40 Val Pro Tyr Leu Ile * 50 53

<210> 1482 <211> 56 <212> PRT <213> Homo sapiens

<400> 1482 Met Glu Arg Trp Leu Gly Leu Ile Gln Thr Leu Trp Leu Pro Ala His 1 5 10 Ser Gly Pro Leu Gly Arg Ala Trp Val Val Pro Arg Ala Thr Ser Gly 20 25 3.0 His Tyr Trp Gly Gly Lys Gly Thr Asn Glu Gly Gln Asp Lys Gly 3.5 His Phe Pro Leu Pro Pro Arg 50

<210> 1483 <211> 202 <212> PRT

<213> Homo sapiens

<400> 1483 Met Leu Leu Leu Gly Leu Cys Leu Gly Leu Ser Leu Cys Val Gly 5 10 Ser Gln Glu Glu Ala Gln Ser Trp Gly His Ser Ser Glu Gln Asp Gly 20 25 30 Leu Arg Val Pro Arg Gln Val Arg Leu Leu Gln Arg Leu Lys Thr Lys 35 40 45 Pro Leu Met Thr Glu Phe Ser Val Lys Ser Thr Ile Ile Ser Arg Tyr 60 Ala Phe Thr Thr Val Ser Cys Arg Met Leu Asn Arg Ala Ser Glu Asp 65 70 Gln Asp Ile Glu Phe Gln Met Gln Ile Pro Ala Ala Ala Phe Ile Thr 90 Asn Phe Thr Met Leu Ile Gly Asp Lys Val Tyr Gln Gly Glu Ile Thr 105 Glu Arg Glu Lys Lys Ser Gly Asp Arg Val Lys Glu Lys Arg Asn Lys 115 120 125 Thr Thr Glu Glu Asn Gly Glu Lys Gly Thr Glu Ile Phe Arg Ala Ser 135 140 Ala Val Ile Pro Ser Lys Asp Lys Ala Ala Phe Phe Leu Ser Tyr Glu . 150 155 Glu Leu Leu Gln Arg Arg Leu Gly Lys Tyr Glu His Ser Ile Ser Val 165 170 Arg Pro Gln Gln Leu Ser Gly Arg Leu Ser Val Asp Val Asn Ile Leu 180 185 Glu Ser Ala Gly Ile Ala Ser Leu Glu Val 195 200 202

<210> 1484 <211> 477 <212> PRT <213> Homo sapiens

<400> 1484 Met Pro Gln Leu Ser Leu Ser Trp Leu Gly Leu Gly Gln Val Ala Ala 1 5 10 Phe Pro Trp Leu Leu Leu Leu Ala Gly Ala Ser Arg Leu Leu Ala 2.0 25 Gly Phe Leu Ala Trp Thr Tyr Ala Phe Tyr Asp Asn Cys Arg Arg Leu 40 Gln Tyr Phe Pro Gln Pro Pro Lys Gln Lys Trp Phe Trp Gly Gln Pro 55 60 Gly Pro Pro Ala Ile Ala Pro Lys Asp Asp Leu Ser Ile Arg Phe Leu 70 75 Lys Pro Trp Leu Gly Glu Gly Ile Leu Leu Ser Gly Gly Asp Lys Trp 85 90 Ser Arg His Arg Arg Met Leu Thr Pro Ala Phe His Phe Asn Ile Leu 100 105 Lys Ser Tyr Ile Thr Ile Phe Asn Lys Ser Ala Asn Ile Met Leu Asp 115 120 125 Lys Trp Gln His Leu Ala Ser Glu Gly Ser Ser Cys Leu Asp Met Phe 130 135 140 Glu His Ile Ser Leu Met Thr Leu Asp Ser Leu Gln Lys Cys Ile Phe 150 155 Ser Phe Asp Ser His Cys Gln Glu Arg Pro Ser Glu Tyr Ile Ala Thr 170 Ile Leu Glu Leu Ser Ala Leu Val Glu Lys Arg Ser Gln His Ile Leu 180 185 190 Gln His Met Asp Phe Leu Tyr Tyr Leu Ser His Asp Gly Arg Arg Phe 200 205 His Arg Ala Cys Arg Leu Val His Asp Phe Thr Asp Ala Val Ile Arg 215 220 Glu Arg Arg Arg Thr Leu Pro Thr Gln Gly Ile Asp Asp Phe Phe Lys 230 235 Asp Lys Ala Lys Ser Lys Thr Leu Asp Phe Ile Asp Val Leu Leu Leu 245 Ser Lys Asp Glu Asp Gly Lys Ala Leu Ser Asp Glu Asp Ile Arg Ala 260 265 270 Glu Ala Asp Thr Phe Met Phe Gly Gly His Asp Thr Thr Ala Ser Gly 280 285 Leu Ser Trp Val Leu Tyr Asn Leu Ala Arg His Pro Glu Tyr Gln Glu 295 300 Arg Cys Arg Gln Glu Val Gln Glu Leu Leu Lys Asp Arg Asp Pro Lys 310 315 Glu Ile Glu Trp Asp Asp Leu Ala Gln Leu Pro Phe Leu Thr Met Cys 325 330 Val Lys Glu Ser Leu Arg Leu His Pro Pro Ala Pro Phe Ile Ser Arg 340 345 Cys Cys Thr Gln Asp Ile Val Leu Pro Asp Gly Arg Val Ile Pro Lys 360 365 Gly Ile Thr Cys Leu Ile Asp Ile Ile Gly Val His His Asn Pro Thr 375 Val Trp Pro Asp Pro Glu Val Tyr Asp Pro Phe Arg Phe Asp Pro Glu

385 390 395 Asn Ser Lys Gly Arg Ser Pro Leu Ala Phe Ile Pro Phe Ser Ala Gly 405 410 415 Pro Arg Asn Cys Ile Gly Gln Ala Phe Ala Met Ala Glu Met Lys Val 425 Val Leu Ala Leu Met Leu Leu His Phe Arg Phe Leu Pro Asp His Thr 440 445 Glu Pro Arg Arg Lys Leu Glu Leu Ile Met Arg Ala Glu Gly Gly Leu 450 455 460 Trp Leu Arg Val Glu Pro Leu Asn Val Ser Leu Gln 470 475 476

<210> 1485 <211> 67 <212> PRT <213> Homo sapiens

<400> 1485 Met Ala Cys Cys Leu Phe Leu Asn Gly Ser Trp Leu Ser Met Ala Leu 10 , Lys Phe Phe Asn Cys Trp Gly Lys Lys Ile Lys Arg Ile Ile Phe Tyr 25 Val Lys Ile Met Lys Phe Lys Phe Gln Cys Pro Gln Ile Asn Thr Ala 40 Thr Tyr Ile His Leu His Gly Cys Phe Cys Thr Ser Met Ala Glu Leu 55 Ser Ser * 65 66

<210> 1486 <211> 93 <212> PRT

<213> Homo sapiens

<400> 1486 Met Gly Ser Ser Val Leu Ser Ile Trp Ile Leu Ser Pro Ser Ile Tyr 10 Pro Ile Leu Ser Pro Leu Ala Met Pro Cys Leu Ser Arg Thr Asp Leu 20 30 Ile Arg Val Arg Arg Ile Gln Gly Ala Trp Pro Ser Glu Gly Thr Ala 3.5 . 45 40 Ser Ser Ile Arg Gly Trp Val Leu Thr Lys Leu Arg Met Ser Ser Gly 60 Lys Ala Leu Glu Ala Leu Tyr Cys Ile Pro Gly Ala Ala Gln His Pro 75 70 Gly Leu Gly Val Thr Arg Val Trp Ser Gly Arg Thr $\,\,$ * 90

<210> 1487 <211> 88 <212> PRT

<213> Homo sapiens

<400> 1487 Met Gln Lys Val Thr Leu Gly Leu Leu Val Phe Leu Ala Gly Phe Pro ו 5 Val Leu Asp Ala Asn Asp Leu Glu Asp Lys Asn Ser Pro Phe Tyr Tyr 20 25 Asp Trp His Ser Leu Gln Val Gly Gly Leu Ile Cys Ala Gly Val Leu 3.5 40 Cys Ala Met Gly Ile Ile Ile Val Met Ser Ala Lys Cys Lys Cys Lys 55 60 Phe Gly Gln Lys Ser Gly His His Pro Gly Glu Thr Pro Pro Leu Ile 70 Thr Pro Gly Ser Ala Gln Ser * 85 87

<210> 1488 <211> 268 <212> PRT <213> Homo sapiens

<400> 1488 Met Gly Ser Ala Cys Ile Lys Val Thr Lys Tyr Phe Leu Phe Leu Phe 1 10 Asn Leu Ile Phe Phe Ile Leu Gly Ala Val Ile Leu Gly Phe Gly Val 20 25 Trp Ile Leu Ala Asp Lys Ser Ser Phe Ile Ser Val Leu Gln Thr Ser 40 Ser Ser Ser Leu Arg Met Gly Ala Tyr Val Phe Ile Gly Val Gly Ala 50 55 60 Val Thr Met Leu Met Gly Phe Leu Gly Cys Ile Gly Ala Val Asn Glu 70 75 Val Arg Cys Leu Leu Gly Leu Tyr Phe Ala Phe Leu Leu Leu Ile Leu 85 90 Ile Ala Gln Val Thr Ala Gly Ala Leu Phe Tyr Phe Asn Met Gly Lys 100 105 Leu Lys Gln Glu Met Gly Gly Ile Val Thr Glu Leu Ile Arg Asp Tyr 115 120 125 Asn Ser Ser Arg Glu Asp Ser Leu Gln Asp Ala Trp Asp Tyr Val Gln 135 Ala Gln Val Lys Cys Cys Gly Trp Val Ser Phe Tyr Asn Trp Thr Asp 150 155 Asn Ala Glu Leu Met Asn Arg Pro Glu Val Thr Tyr Pro Cys Ser Cys 165 170 Glu Val Lys Gly Glu Glu Asp Asn Ser Leu Ser Val Arg Lys Gly Phe 180 185 Cys Glu Ala Pro Gly Asn Arg Thr Gln Ser Gly Asn His Pro Glu Asp 195 200 205 Trp Pro Val Tyr Gln Glu Gly Cys Met Glu Lys Val Gln Ala Trp Leu 210 215 220 Gln Glu Asn Leu Gly Ile Ile Leu Gly Val Gly Val Gly Val Ala Ile 230 235 Ile Glu Leu Leu Gly Met Val Leu Ser Ile Cys Leu Cys Arg His Val 245 250 His Ser Glu Asp Tyr Ser Lys Val Pro Lys Tyr *

260 265 267

<210> 1489 <211> 832 <212> PRT <213> Homo sapiens

<400> 1489 Met Thr Leu Ala Leu Ala Tyr Leu Leu Ala Leu Pro Gln Val Leu Asp 5 10 Ala Asn Arg Cys Phe Glu Lys Gln Ser Pro Ser Ala Leu Ser Leu Gln 20 25 Leu Ala Ala Tyr Tyr Tyr Ser Leu Gln Ile Tyr Ala Arg Leu Ala Pro 40 Cys Phe Arg Asp Lys Cys His Pro Leu Tyr Arg Ala Asp Pro Lys Glu 60 55 Leu Ile Lys Met Val Thr Arg His Val Thr Arg His Glu His Glu Ala
70 75 80 70 75 Trp Pro Glu Asp Leu Ile Ser Leu Thr Lys Gln Leu His Cys Tyr Asn 90 85 Glu Arg Leu Leu Asp Phe Thr Gln Ala Gln Ile Leu Gln Gly Leu Arg 105 Lys Gly Val Asp Val Gln Arg Phe Thr Ala Asp Asp Gln Tyr Lys Arg 120 125 115 Glu Thr Ile Leu Gly Leu Ala Glu Thr Leu Glu Glu Ser Val Tyr Ser 135 140 Ile Ala Ile Ser Leu Ala Gln Arg Tyr Ser Val Ser Arg Trp Glu Val 150 155 Phe Met Thr His Leu Glu Phe Leu Phe Thr Asp Ser Gly Leu Ser Thr 165 170 Leu Glu Ile Glu Asn Arg Ala Gln Asp Leu His Leu Phe Glu Thr Leu 180 185 Lys Thr Asp Pro Glu Ala Phe His Gln His Met Val Lys Tyr Ile Tyr 195 200 205 Pro Thr Ile Gly Gly Phe Asp His Glu Arg Leu Gln Tyr Tyr Phe Thr 215 220 Leu Leu Glu Asn Cys Gly Cys Ala Asp Leu Gly Asn Cys Ala Ile Lys 235 230 Pro Glu Thr His Ile Arg Leu Leu Lys Lys Phe Lys Val Val Ala Ser 245 250 Gly Leu Asn Tyr Lys Lys Leu Thr Asp Glu Asn Met Ser Pro Leu Glu 265 270 260 Ala Leu Glu Pro Val Leu Ser Ser Gln Asn Ile Leu Ser Ile Ser Lys 275 280 Leu Val Pro Lys Ile Pro Glu Lys Asp Gly Gln Met Leu Ser Pro Ser 300 295 Ser Leu Tyr Thr Ile Trp Leu Gln Lys Leu Phe Trp Thr Gly Asp Pro 310 315 His Leu Ile Lys Gln Val Pro Gly Ser Ser Pro Glu Trp Leu His Ala 325 330 Tyr Asp Val Cys Met Lys Tyr Phe Asp Arg Leu His Pro Gly Asp Leu 345 350 Ile Thr Val Val Asp Ala Val Thr Phe Ser Pro Lys Ala Val Thr Lys 365 360 Leu Ser Val Glu Ala Arg Lys Glu Met Thr Arg Lys Ala Ile Lys Thr 375 380

Val Lys His Phe Ile Glu Lys Pro Arg Lys Arg Asn Ser Glu Asp Glu Ala Gln Glu Ala Lys Asp Ser Lys Val Thr Tyr Ala Asp Thr Leu Asn His Leu Glu Lys Ser Leu Ala His Leu Glu Thr Leu Ser His Ser Phe Ile Leu Ser Leu Lys Asn Ser Glu Gln Glu Thr Leu Gln Lys Tyr Ser His Leu Tyr Asp Leu Ser Arg Ser Glu Lys Glu Lys Leu His Asp Glu Ala Val Ala Ile Cys Leu Asp Gly Gln Pro Leu Ala Met Ile Gln Gln Leu Leu Glu Val Ala Val Gly Pro Leu Asp Ile Ser Pro Lys Asp Ile Val Gln Ser Ala Ile Met Lys Ile Ile Ser Ala Leu Ser Gly Gly Ser Ala Asp Leu Gly Gly Pro Arg Asp Pro Leu Lys Val Leu Glu Gly Val Val Ala Ala Val His Ala Ser Val Asp Lys Gly Glu Glu Leu Val Ser Pro Glu Asp Leu Leu Glu Trp Leu Arg Pro Phe Cys Ala Asp Asp Ala Trp Pro Val Arg Pro Arg Ile His Val Leu Gln Ile Leu Gly Gln Ser Phe His Leu Thr Glu Glu Asp Ser Lys Leu Leu Val Phe Phe Arg Thr Glu Ala Ile Leu Lys Ala Ser Trp Pro Gln Arg Gln Val Asp Ile Ala Asp Ile Glu Asn Glu Glu Asn Arg Tyr Cys Leu Phe Met Glu Leu Leu Glu Ser Ser His His Glu Ala Glu Phe Gln His Leu Val Leu Leu Gln Ala Trp Pro Pro Met Lys Ser Glu Tyr Val Ile Thr Asn Asn Pro Trp Val Arg Leu Ala Thr Val Met Leu Thr Arg Cys Thr Met Glu Asn Lys Glu Gly Leu Gly Asn Glu Val Leu Lys Met Cys Arg Ser Leu Tyr Asn Thr Lys Gln Met Leu Pro Ala Glu Gly Val Lys Glu Leu Cys Leu Leu Leu Leu Asn Gln Ser Leu Leu Leu Pro Ser Leu Lys Leu Leu Glu Ser Arg Asp Glu His Leu His Glu Met Ala Leu Glu Gln Ile Thr Ala Val Thr Thr Val Asn Asp Ser Asn Cys Asp Gln Glu Leu Leu Ser Leu Leu Leu Asp Ala Lys Leu Leu Val Lys Cys Val Ser Thr Pro Phe Tyr Pro Arg Ile Val Asp His Leu Leu Ala Ser Leu Gln Gln Gly Arg Trp Asp Ala Glu Glu Leu Gly Arg His Leu Arg Glu Ala Gly His Glu Ala Glu Ala Gly Ser Leu Leu Leu Ala Val Arg Gly Thr His Gln Ala Phe Arg Thr Phe Ser Thr Ala Leu Arg Ala Ala Gln His Trp Val *

<210> 1490 <211> 55 <212> PRT <213> Homo sapiens

<400> 1490

<210> 1491 <211> 134 <212> PRT <213> Homo sapiens

<400> 1491

Met Thr Thr Thr Phe Pro Pro Arg Lys Met Val Ala Gln Phe Leu Leu 1 5 10 Val Ala Gly Asn Val Ala Asn Ile Thr Thr Val Ser Leu Trp Glu Glu 20 25 30 Phe Ser Ser Asp Leu Ala Asp Leu Arg Phe Leu Asp Met Ser Gln 3.5 40 Asn Gln Phe Gln Tyr Leu Pro Asp Gly Phe Leu Arg Lys Met Pro Ser 50 55 60 Leu Ser His Leu Asn Leu His Gln Asn Cys Leu Met Thr Leu His Ile 70 . 75 Arg Glu His Glu Pro Pro Gly Ala Leu Thr Glu Leu Asp Leu Ser His 90 Asn Gln Leu Ser Glu Leu His Leu Ala Pro Gly Leu Ala Ser Cys Leu 100 105 110 Gly Ser Leu Arg Leu Phe Asn Leu Ser Ser Asn Gln Leu Leu Gly Val 115 120 Pro Pro Gly Pro Leu Tyr 130 . 134

<210> 1492 <211> 71 <212> PRT <213> Homo sapiens

Cys Glu Ser Ile Lys Pro Leu Phe Leu Ile Asn Tyr Pro Val Ser Asn 50 55 60

Lys Ser Leu Leu Ala Thr * 65 70

<210> 1493 <211> 78 <212> PRT <213> Homo sapiens

<210> 1494 <211> 121 <212> PRT <213> Homo sapiens

<400> 1494 Met Ala Gly Leu Asn Cys Gly Val Ser Ile Ala Leu Leu Gly Val Leu 10 Leu Leu Gly Ala Ala Arg Leu Pro Arg Gly Ala Glu Ala Phe Glu Ile 25 Ala Leu Pro Arg Glu Ser Asn Ile Thr Val Leu Ile Lys Leu Gly Thr 35 40 45 Pro Thr Leu Leu Ala Lys Pro Cys Tyr Ile Val Ile Ser Lys Arg His 55 60 Ile Thr Met Leu Ser Ile Lys Ser Gly Glu Arg Ile Val Phe Thr Phe 70 75 Ser Cys Gln Ser Pro Glu Asn His Phe Val Ile Glu Ile Gln Lys Asn 90 85 Ile Asp Cys Met Ser Gly Pro Cys Pro Phe Gly Glu Val Gln Leu Gln 100 105 Pro Ser Thr Ser Leu Leu Pro Thr Leu 115 120 121

<210> 1495 <211> 91 <212> PRT <213> Homo sapiens

<210> 1496 <211> 72 <212> PRT <213> Homo sapiens

<210> 1497 <211> 196 <212> PRT <213> Homo sapiens

<400> 1497 Met Ala Pro Arg Ala Leu Pro Gly Ser Ala Val Leu Ala Ala Val 1 5 10 Phe Val Gly Gly Ala Val Ser Ser Pro Leu Val Ala Pro Asp Asn Gly 20 25 Ser Ser Arg Thr Leu His Ser Arg Thr Glu Thr Thr Pro Ser Pro Ser 3.5 40 Asn Asp Thr Gly Asn Gly His Pro Glu Tyr Ile Ala Tyr Ala Leu Val 55 Pro Val Phe Phe Ile Met Gly Leu Phe Gly Val Leu Ile Cys His Leu 65 70 Leu Lys Lys Gly Tyr Arg Cys Thr Thr Glu Ala Glu Gln Asp Ile 85 90 Glu Glu Glu Lys Val Glu Lys Ile Glu Leu Asn Asp Ser Val Asn Glu 100 105 110 Asn Ser Asp Thr Val Gly Gln Ile Val His Tyr Ile Met Lys Asn Glu 120

Ala Asn Ala Asp Val Leu Lys Ala Met Val Ala Asp Asn Ser Leu Tyr
130 - 140

Asp Pro Glu Ser Pro Val Thr Pro Ser Thr Pro Gly Glu Pro Ala Ser
145 - 150 - 150

Glu Ser Trp Ala Phe Val Thr Arg Gly Asp Ala Arg Glu Ala Arg Leu
165 - 165 - 175

Trp Pro Ser Ser Ala Tyr Gly Gly Arg Cys Cys Arg Glu Gly Cys Val
180

Ser Val * 195 - 195 - 195

<210> 1498 <211> 75 <212> PRT <213> Homo sapiens

<210> 1499 <211> 62 <212> PRT <213> Homo sapiens

<210> 1500 <211> 138 <212> PRT <213> Homo sapiens

 $<\!400\!>$ 1500 \cdot Met Pro Ile Trp Lys Pro Phe Met Ala Trp Met Ala Ala Trp Ala Leu

5 10 Ala Val Leu Ser Lys Leu Thr Lys Pro Ile His Leu Leu Trp Met Val 20 25 Ala Arg Ser Ile Asn Thr Leu Glu Glu Met Ile Leu Pro Lys Gly Thr Asn Ile Cys Val Ser Ser Val Ser Pro Asn Ser Phe Ser Leu Leu Leu 55 60 Leu Gln Glu Gly Arg Arg Leu Glu Asp Ala Val Arg Asp Gly Arg Asp 70 75 Gly Arg Gly Gly Ala His Gly Cys Val Leu Leu Asp Ser Gly Glu Gly 85 90 Arg Met Gln Cys Leu Gly His Ser Arg Ala Leu Ser Trp Val Trp His 100 105 Lys Ala Ile Gly Ile Asp Glu Phe Pro Gly Gln Gly Ala His Leu Glu 115 120 Arg Ala Arg His Leu Pro Ser His Trp 135 137

<210> 1501 <211> 82 <212> PRT <213> Homo sapiens

<400> 1501 Met Ile Leu Phe Thr Arg Ala Trp Phe Glu Leu Val Thr Leu Val Gln 5 10 Phe Ile Ile Gly Ser Gln Met Leu Tyr Pro Tyr Leu His Ile Glu Glu 20 25 Phe Val Ile Arg Lys Leu Pro Val Leu Leu Tyr Arg Lys Ser Val Ile 35 4.0 Arg Tyr Gln Met Ala Ser Ser Pro Cys Leu Gln Met Phe Lys Gln Tyr 55 60 Cys Gly Trp Ser Arg Lys Ser Leu Arg His Ala Val Lys Cys Arg Ala 65 70 Arg 81

<210> 1502 <211> 54 <212> PRT <213> Homo sapiens

<210> 1503 <211> 62 <212> PRT <213> Homo sapiens

<210> 1504 <211> 46 <212> PRT <213> Homo sapiens

<210> 1505 <211> 48 <212> PRT <213> Homo sapiens

<210> 1506 <211> 190 <212> PRT <213> Homo sapiens

<400> 1506 Met Trp Leu Leu Gly Pro Leu Cys Leu Leu Leu Ser Ser Ala Ala Glu

10 Ser Gln Leu Leu Pro Gly Asn Asn Phe Thr Asn Glu Cys Asn Ile Pro 20 25 Gly Asn Phe Val Cys Ser Asn Gly Arg Cys Ile Pro Gly Ala Trp Gln 40 Cys Asp Gly Leu Pro Asp Cys Phe Asp Lys Ser Asp Glu Lys Glu Cys 55 Pro Lys Ala Lys Ser Lys Cys Gly Pro Thr Phe Phe Pro Cys Ala Ser 70 75 Gly Ile His Cys Ile Ile Gly Arg Phe Arg Cys Asn Gly Phe Glu Asp 90 Cys Pro Asp Gly Ser Asp Glu Glu Asn Cys Thr Ala Asn Pro Leu Leu 100 105 Cys Ser Thr Ala Arg Tyr His Cys Lys Asn Gly Leu Cys Ile Asp Lys 120 Ser Phe Ile Cys Asp Gly Gln Asn Asn Cys Gln Asp Asn Ser Asp Glu 135 140 Glu Ser Cys Glu Ser Ser Gln Val Phe Arg Pro Gln Val Ser Glu Trp 150 155 Gln Ala Arg Pro Arg Asp Leu Cys Ala Arg Trp Asn Ile Pro Phe Leu 170 175 Gly Arg Leu Glu Arg Pro Trp Ser Phe Thr Ser Ser Gln Gln 185

<210> 1507 <211> 60 <212> PRT <213> Homo sapiens

<210> 1508 <211> 48 <212> PRT <213> Homo sapiens

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<210> 1509
<211> 85
<212> PRT
<213> Homo sapiens
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<210> 1510 <211> 55 <212> PRT <213> Homo sapiens

<210> 1511 <211> 108 <212> PRT <213> Homo sapiens

85 90 95 Gly Gln Arg Gly Pro Arg Glu Glu Met Arg Gly * 100 105 107

<210> 1512 <211> 119 <212> PRT <213> Homo sapiens

<400> 1512

Met Val Ala Arg Val Trp Ser Leu Met Arg Phe Leu Ile Lys Gly Ser 5 10 Val Ala Gly Gly Ala Val Tyr Leu Val Tyr Asp Gln Glu Leu Leu Gly 25 Pro Ser Asp Lys Ser Gln Ala Ala Leu Gln Lys Ala Gly Glu Val Val 35 40 45 Pro Pro Ala Met Tyr Gln Phe Ser Gln Tyr Val Cys Gln Gln Thr Gly 55 60 Leu Gln Ile Pro Gln Leu Pro Ala Pro Pro Lys Ile Tyr Phe Pro Ile 70 75 Arg Asp Ser Trp Asn Ala Gly Ile Met Thr Val Met Ser Ala Leu Ser 85 90 Val Ala Pro Ser Lys Ala Arg Glu Tyr Ser Lys Glu Gly Trp Glu Tyr 100 105 Val Lys Ala Arg Thr Lys 115 118

<210> 1513 <211> 973 <212> PRT <213> Homo sapiens

<400> 1513

Met Val Lys Ser Lys Trp Gly Leu Ala Leu Ala Ala Val Val Thr Val 10 Leu Ser Ser Leu Leu Met Ser Val Gly Leu Cys Thr Leu Phe Gly Leu 20 25 Thr Pro Thr Leu Asn Gly Gly Glu Ile Phe Pro Tyr Leu Val Val Val 40 Ile Gly Leu Glu Asn Val Leu Val Leu Thr Lys Ser Val Val Ser Thr 50 55 Pro Val Asp Leu Glu Val Lys Leu Arg Ile Ala Gln Gly Leu Ser Ser 70 Glu Ser Trp Ser Ile Met Lys Asn Met Ala Thr Glu Leu Gly Ile Ile 85 90 Leu Ile Gly Tyr Phe Thr Leu Val Pro Ala Ile Gln Glu Phe Cys Leu 100 105 110 Phe Ala Val Val Gly Leu Val Ser Asp Phe Phe Leu Gln Met Leu Phe 125 115 120 Phe Thr Thr Val Leu Ser Ile Asp Ile Arg Arg Met Glu Leu Ala Asp 140 130 135 Leu Asn Lys Arg Leu Pro Pro Glu Ala Cys Leu Pro Ser Ala Lys Pro 150 155

Val Gly Gln Pro Thr Arg Tyr Glu Arg Gln Leu Ala Val Arg Pro Ser Thr Pro His Thr Ile Thr Leu Gln Pro Ser Ser Phe Arg Asn Leu Arg Leu Pro Lys Arg Leu Arg Val Val Tyr Phe Leu Ala Arg Thr Arg Leu Ala Gln Arg Leu Ile Met Ala Gly Thr Val Val Trp Ile Gly Ile Leu Val Tyr Thr Asp Pro Ala Gly Leu Arg Asn Tyr Leu Ala Ala Gln Val Thr Glu Gln Ser Pro Leu Gly Glu Gly Ala Leu Ala Pro Met Pro Val Pro Ser Gly Met Leu Pro Pro Ser His Pro Asp Pro Ala Phe Ser Ile Phe Pro Pro Asp Ala Pro Lys Leu Pro Glu Asn Gln Thr Ser Pro Gly Glu Ser Pro Glu Arg Gly Gly Pro Ala Glu Val Val His Asp Ser Pro Val Pro Glu Val Thr Trp Gly Pro Glu Asp Glu Glu Leu Trp Arg Lys Leu Ser Phe Arg His Trp Pro Thr Leu Phe Ser Tyr Tyr Asn Ile Thr Leu Ala Lys Arg Tyr Ile Ser Leu Leu Pro Val Ile Pro Val Thr Leu Arg Leu Asn Pro Arg Glu Ala Leu Glu Gly Arg His Pro Gln Asp Gly Arg Ser Ala Trp Pro Pro Pro Gly Pro Ile Pro Ala Gly His Trp Glu Ala Gly Pro Lys Gly Pro Gly Gly Val Gln Ala His Gly Asp Val Thr Leu Tyr Lys Val Ala Ala Leu Gly Leu Ala Thr Gly Ile Val Leu Val Leu Leu Leu Cys Leu Tyr Arg Val Leu Cys Pro Arg Asn Tyr Gly Gln Leu Gly Gly Bro Gly Arg Arg Arg Gly Glu Leu Pro Cys Asp Asp Tyr Gly Tyr Ala Pro Pro Glu Thr Glu Ile Val Pro Leu Val Leu Arg Gly His Leu Met Asp Ile Glu Cys Leu Ala Ser Asp Gly Met Leu Leu Val Ser Cys Cys Leu Ala Gly His Val Cys Val Trp Asp Ala Gln Thr Gly Asp Cys Leu Thr Arg Ile Pro Arg Pro Gly Arg Gln Arg Arg Asp Ser Gly Val Gly Ser Gly Leu Glu Ala Gln Glu Ser Trp Glu Arg Leu Ser Asp Gly Gly Lys Ala Gly Pro Glu Glu Pro Gly Asp Ser Pro Pro Leu Arg His Arg Pro Arg Gly Pro Pro Pro Pro Ser Leu Phe Gly Asp Gln Pro Asp Leu Thr Cys Leu Ile Asp Thr Asn Phe Ser Ala Gln Pro Arg Ser Ser Gln Pro Thr Gln Pro Glu Pro Arg His Arg Ala Val Cys Gly Arg Ser Arg Asp Ser Pro Gly Tyr Asp Phe Ser Cys Leu Val Gln Arg Val Tyr Gln Glu Glu Gly Leu Ala Ala Val Cys Thr Pro . 615 Ala Leu Arg Pro Pro Ser Pro Gly Pro Val Leu Ser Gln Ala Pro Glu

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625
                  630
Asp Glu Gly Gly Ser Pro Glu Lys Gly Ser Pro Ser Leu Ala Trp Ala
                                650
Pro Ser Ala Glu Gly Ser Ile Trp Ser Leu Glu Leu Gln Gly Asn Leu
                            665
Ile Val Val Gly Arg Ser Ser Gly Arg Leu Glu Val Trp Asp Ala Ile
               680
Glu Gly Val Leu Cys Cys Ser Ser Glu Glu Val Ser Ser Gly Ile Thr
                    695
Ala Leu Val Phe Leu Asp Lys Arg Ile Val Ala Ala Arg Leu Asn Gly
                 710
                                   715
Ser Leu Asp Phe Phe Ser Leu Glu Thr His Thr Ala Leu Ser Pro Leu
              725
                               730
Gln Phe Arg Gly Thr Pro Gly Arg Gly Ser Ser Pro Ala Ser Pro Val
         740
                   745
Tyr Ser Ser Ser Asp Thr Val Ala Cys His Leu Thr His Thr Val Pro
               760
     755
Cys Ala His Gln Lys Pro Ile Thr Ala Leu Lys Ala Ala Ala Gly Arg
                     775
                                     780
Leu Val Thr Gly Ser Gln Asp His Thr Leu Arg Val Phe Arg Leu Glu
                 790
                                  795
Asp Ser Cys Cys Leu Phe Thr Leu Gln Gly His Ser Gly Ala Ile Thr
              805
                                810
                                               815
Thr Val Tyr Ile Asp Gln Thr Met Val Leu Ala Ser Gly Gly Gln Asp
                   825
Gly Ala Ile Cys Leu Trp Asp Val Leu Thr Gly Ser Arg Val Ser His
               840
                                845
Val Phe Ala His Arg Gly Asp Val Thr Ser Leu Thr Cys Thr Thr Ser
                     855
Cys Val Ile Ser Ser Gly Leu Asp Asp Leu Ile Ser Ile Trp Asp Arg
              870
                                   875
Ser Thr Gly Ile Lys Phe Tyr Ser Ile Gln Gln Asp Leu Gly Cys Gly
             885
                               890
Ala Ser Leu Gly Val Ile Ser Asp Asn Leu Leu Val Thr Gly Gly Gln
         900
                           905
Gly Cys Val Ser Phe Trp Asp Leu Asn Tyr Gly Asp Leu Leu Gln Thr
     915
                        920
                                          925
Val Tyr Leu Gly Lys Asn Ser Glu Ala Gln Pro Ala Arg Gln Ile Leu
                    935
                              940
Val Leu Asp Asn Ala Ala Ile Val Cys Asn Phe Gly Ser Glu Leu Ser
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Leu Val Tyr Val Pro Ser Val Leu Glu Lys Leu Asp *
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<210> 1514 <211> 77 <212> PRT <213> Homo sapiens

<210> 1515 <211> 148 <212> PRT <213> Homo sapiens

<400> 1515 Met Leu Gly Ser Arg Leu Met Thr Leu Thr Val Cys Ala Gly Ala Leu 1 10 Ala Arg Gly Arg Gly Thr Gly Thr Cys Glu Thr Arg Gln Glu Gly Lys 20 25 Gly Gln Asn His Ser Thr Leu Ala Trp Pro His Glu Glu Pro Gly Ala . 35 40 45 Ser Thr Gly Arg Asp Gly Gly Lys Leu Pro Arg Gly Gln Cys Leu Leu 55 60 Glu Lys Gly Pro Gly Gly Ala Gly Asp Lys Val Ser Lys Ile Phe Pro 70 75 Ser Cys Ala Leu Ala Leu Leu Ser Leu Ala Asn Pro Gly Pro Arg 90 Gly Pro Arg Glu Phe His Leu Cys Trp Gly Trp Leu Asp Arg Gly Val 100 105 Thr Gln Glu Ala Val His Val Gly Glu Lys Arg Gly Gly Leu Gly Ser 115 120 125 Gly Arg Lys Gly Gly Trp Trp Pro Gly Trp Asp Pro Gly Cys Arg Asp 135 130 140 Val Ile Thr * 145 147

<210> 1516 <211> 274 <212> PRT <213> Homo sapiens

<400> 1516

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 Leu
 Met
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 Leu
 Val
 Leu
 Ala

 Val
 Gly
 Gly
 Thr
 Glu
 His
 Ala
 Tyr
 Arg
 Pro
 Gly
 Arg
 Arg
 Val
 Cys
 Ala

 Val
 Arg
 Ala
 His
 Gly
 Asp
 Pro
 Val
 Ser
 Glu
 Ser
 Phe
 Val
 Gly
 Arg
 Ala
 Cys
 Ser
 Thr
 Arg
 Arg
 Ala
 Cys
 Ser
 Thr
 Arg
 Arg
 Ala
 Cys
 Ser
 Thr
 Arg
 Arg

85 90 95

Gly Leu Pro Gly Ala Cys Gly Ala Ala Ile Cys Gln Pro Pro Cys Arg
100 105 110

Asn Gly Gly Ser Cys Val Gln Pro Gly Arg Cys Arg Cys Pro Ala Gly

115 120 Trp Arg Gly Asp Thr Cys Gln Ser Asp Val Asp Glu Cys Ser Ala Arg 135 140 Arg Gly Gly Cys Pro Gln Arg Cys Val Asn Thr Ala Gly Ser Tyr Trp 150 155 Cys Gln Cys Trp Glu Gly His Ser Leu Ser Ala Asp Gly Thr Leu Cys 170 175 165 Val Pro Lys Gly Gly Pro Pro Arg Val Ala Pro Asn Pro Thr Gly Val 180 185 190 Asp Ser Ala Met Lys Glu Glu Val Gln Arg Leu Gln Ser Arg Val Asp 200 Leu Leu Glu Glu Lys Leu Gln Leu Val Leu Ala Pro Leu His Ser Leu 215 220 Ala Ser Gln Ala Leu Glu His Gly Leu Pro Asp Pro Gly Ser Leu Leu 230 235 Val His Ser Phe Gln Gln Leu Gly Arg Ile Asp Ser Leu Ser Glu Gln 245 250 Ile Ser Phe Leu Glu Glu Gln Leu Gly Ser Cys Ser Cys Lys Lys Asp 260 265 Ser * 273

<210> 1517 <211> 246 <212> PRT <213> Homo sapiens

<400> 1517 Met Thr Leu Phe Pro Val Leu Leu Phe Leu Val Ala Gly Leu Leu Pro 5 10 Ser Phe Pro Ala Asn Glu Asp Lys Asp Pro Ala Phe Thr Ala Leu Leu 20 Thr Thr Gln Thr Gln Val Gln Arg Glu Ile Val Asn Lys His Asn Glu Leu Arg Arg Ala Val Ser Pro Pro Ala Arg Asn Met Leu Lys Met Glu 55 60 Trp Asn Lys Glu Ala Ala Ala Asn Ala Gln Lys Trp Ala Asn Gln Cys 70 Asn Tyr Arg His Ser Asn Pro Lys Asp Arg Met Thr Ser Leu Lys Cys 8.5 90 Gly Glu Asn Leu Tyr Met Ser Ser Ala Ser Ser Ser Trp Ser Gln Ala 105 110 100 Ile Gln Ser Trp Phe Asp Glu Tyr Asn Asp Phe Asp Phe Gly Val Gly 120 Pro Lys Thr Pro Asn Ala Val Val Gly His Tyr Thr Gln Val Val Trp 135 Tyr Ser Ser Tyr Leu Val Gly Cys Gly Asn Ala Tyr Cys Pro Asn Gln 150 155 Lys Val Leu Lys Tyr Tyr Val Cys Gln Tyr Cys Pro Ala Gly Asn 165 170 **1**75 Trp Ala Asn Arg Leu Tyr Val Pro Tyr Glu Gln Gly Ala Pro Cys Ala 185 180 190 Ser Cys Pro Asp Asn Cys Asp Asp Gly Leu Cys Thr Asn Gly Cys Lys 195 200 205 Tyr Glu Asp Leu Tyr Ser Asn Cys Lys Ser Leu Lys Leu Thr Leu Thr 215

 Cys
 Lys
 His
 Gln
 Leu
 Val
 Arg
 Asp
 Ser
 Cys
 Lys
 Ala
 Ser
 Cys
 Asn
 Cys
 240

 Ser
 Asn
 Ser
 Ile
 Tyr
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 245

<210> 1518 <211> 122 <212> PRT <213> Homo sapiens

<400> 1518 Met Arg Asn Arg Arg Thr Glu Arg Thr Cys Thr Pro Pro Leu Ala Ser 10 Pro Tyr Asn Leu Val Pro His Leu Gln Asn Leu Leu Ala Val Leu Leu 20 25 Met Ile Leu Val Leu Thr Pro Met Val Leu Asn Pro His Lys Leu Tyr 35 40 4.5 Gln Met Met Thr Gln Asn Ile Leu Leu Gln Lys Pro Gln Lys Asn Phe . 50 55 60 Ile Trp Thr Ala Leu Lys Gly Asn Leu Ser Tyr Pro Arg Asn Leu Leu . 70 Leu Gln Ser His Leu Ser Leu Leu Leu His Ser Leu Leu Leu Glu Leu 85 90 Asn Gln Arg Val Cys Leu Leu Pro Arg Ser Leu Ile Asp Pro Gly Lys 100 105 Arg Leu Lys Lys Pro Met Glu Thr Phe 120 122

<210> 1519 <211> 249 <212> PRT <213> Homo sapiens

<400> 1519 Met Gly Leu Ser Ile Phe Leu Leu Cys Val Leu Gly Leu Ser Gln 10 Ala Ala Thr Pro Lys Ile Phe Asn Gly Thr Glu Cys Gly Arg Asn Ser 20 25 Gln Pro Trp Gln Val Gly Leu Phe Glu Gly Thr Ser Leu Arg Cys Gly 40 Gly Val Leu Ile Asp His Arg Trp Val Leu Thr Ala Ala His Cys Ser -55 60 Gly Ser Arg Tyr Trp Val Arg Leu Gly Glu His Ser Leu Ser Gln Leu 70 75 Asp Trp Thr Glu Gln Ile Arg His Ser Gly Phe Ser Val Thr His Pro 85 90 95 Gly Tyr Leu Gly Ala Ser Thr Ser His Glu His Asp Leu Arg Leu Leu 100 105 110 Arg Leu Arg Leu Pro Val Arg Val Thr Ser Ser Val Gln Pro Leu Pro 120 125 Leu Pro Asn Asp Cys Ala Thr Ala Gly Thr Glu Cys His Val Ser Gly 135 140 Trp Gly Ile Thr Asn His Pro Arg Asn Pro Phe Pro Asp Leu Leu Gln

145 150 155 Cys Leu Asn Leu Ser Ile Val Ser His Ala Thr Cys His Gly Val Tyr 1.65 170 Pro Gly Arg Ile Thr Ser Asn Met Val Cys Ala Gly Gly Val Pro Gly 180 185 Gln Asp Ala Cys Gln Gly Asp Ser Gly Gly Pro Leu Val Cys Gly Gly 195 200 Val Leu Gin Gly Leu Val Ser Trp Gly Ser Val Gly Pro Cys Gly Gin 215 220 Asp Gly Ile Pro Gly Val Tyr Thr Tyr Ile Cys Lys Tyr Val Asp Trp 230 235 Ile Arg Met Ile Met Arg Asn Asn 245 248

<210> 1520 <211> 292 <212> PRT <213> Homo sapiens

<400> 1520 Met Leu Val Leu Gln Ile Leu Leu Cys Ile Arg Glu Phe Ile Leu Glu 5 10 Arg Ser Leu Ile Asn Val Lys Asn Val Ala Lys Ser Leu Ala Val Val 25 Leu Ala Leu Leu Asn Ile Gly Lys Phe Ile Leu Glu Lys Ile Phe Thr 35 40 Asn Ala Lys Tyr Val Leu Asn Leu Leu Leu Val Ser Gln Ile Leu Leu 55 60 Cys Met Arg Glu Phe Ile Leu Glu Arg Asn Pro Ile Asn Val Lys Asn 70 75 Val Ala Lys Pro Phe Leu Ile Val His Thr Leu Phe Asp Ile Ile Glu 85 90 Phe Ile Leu Glu Lys Asn His Thr Asn Val Lys His Val Ala Asn Leu 105 Leu Val Thr Pro Gln Val Leu Leu Cys Ile Gly Glu Leu Ile Leu Glu 115 120 125 Arg Asn Pro Ile His Val Lys Asn Val Ala Lys Pro Leu Val Ile Val 130 135 140 Gln Met Leu Phe Ser Ile Gly Glu Phe Ile Leu Ala Arg Àsp Pro Thr 150 155 Asn Val Lys Asn Val Ala Lys Pro Ser Thr Ile Gly His Thr Ser Leu 165 170 His Ile Lys Glu Val Ile Leu Glu Arg Asp Pro Thr Asn Val Lys Asn 180 185 190 Val Ala Lys Pro Ser Thr Leu Gly His Thr Ser Leu His Ile Gly Glu 200 205 Asp Ile Leu Glu Arg Asp Pro Thr Asn Val Met Asn Val Val Lys Pro 215 220 Ser Ala Ile Gly His Thr Ser Leu His Ile Gly Glu Val Ile Val Glu 230 235 Arg Asp Pro Thr Asn Val Lys Asn Val Ala Lys Pro Leu Thr Leu Gly 245 250 His Thr Ser Leu His Ile Arg Glu Val Ile Leu Glu Lys Asn Phe Lys 260 265 Asn Val Lys His Gly Ala Asp Phe Leu Leu Val Thr His Val Leu Leu 280

Cys Ile Arg * 290 291

> <210> 1521 <211> 129

<212> PRT

<213> Homo sapiens

<400> 1521

Met Gly Ser Thr Ala Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly Val Cys Ala Glu Val Gln Leu Val Gln Ser Gly Ala Glu Val Lys Lys 20 25 Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Gly Ser Gly Tyr Ser Phe 35 45 40 Thr Ser Tyr Trp Ile Gly Trp Val Arg Gln Met Pro Gly Lys Gly Leu 55 60 Glu Trp Met Gly Ile Ile Tyr Pro Gly Asp Ser Asp Thr Arg Tyr Ser 70 75 Pro Ser Phe Gln Gly Gln Val Thr Ile Ser Ala Asp Lys Ser Ile Ser 85 90 Thr Ala Tyr Leu Gln Trp Ser Ser Leu Lys Ala Ser Asp Thr Ala Met 100 105 110 Tyr Tyr Cys Ala Arg His Thr Val Arg Glu Thr Ser Pro Glu Pro Val 115

120

125 128

<210> 1522 <211> 66 <212> PRT

<213> Homo sapiens

<400> 1522

Met Val Val Leu Pro Cys Phe Ala Val Leu Lys Leu Leu Phe Gly 5 10 Gln Ser Lys Leu Gly Pro Met Gln Pro Ser Gln Ser Gly Leu Asp Pro 20 25 30 Val Gly Ala Gly Met Ser Ala Ser Ile Ala Asp Gly Ser Arg Ala Thr 35 40 45 Ala Asp Lys Ala Val Leu Leu Asp Pro Thr Ser Leu Leu Glu Tyr 55 Thr * 65

<210> 1523 <211> 131 <212> PRT <213> Homo sapiens

<400> 1523 Met Ile Leu Leu Ala Phe Leu Val Cys Trp Gly Pro Leu Phe Gly Leu 5 10 Leu Leu Ala Asp Val Phe Gly Ser Asn Leu Trp Ala Gln Glu Tyr Leu 2.0 25 Arg Gly Met Asp Trp Ile Leu Ala Leu Ala Val Leu Asn Ser Ala Val 3.5 40 Asn Pro Ile Ile Tyr Ser Phe Arg Ser Arg Glu Val Cys Arg Ala Val 60 Leu Ser Phe Leu Cys Cys Gly Cys Leu Arg Leu Gly Met Arg Gly Pro 70 7.5 Gly Asp Cys Leu Ala Arg Ala Val Glu Ala His Ser Gly Ala Ser Thr 85 90 Thr Asp Ser Ser Leu Arg Pro Arg Asp Ser Phe Arg Gly Ser Arg Ser 100 105 110 Leu Ser Phe Arg Met Arg Glu Pro Leu Ser Ser Ile Ser Ser Val Arg 120 Ser Ile * 130

<210> 1524 <211> 52 <212> PRT <213> Homo sapiens

<210> 1525 <211> 246 <212> PRT <213> Homo sapiens

<400> 1525 Met Thr Leu Phe Pro Val Leu Leu Phe Leu Val Ala Gly Leu Leu Pro 1 5 Ser Phe Pro Ala Asn Glu Asp Lys Asp Pro Ala Phe Thr Ala Leu Leu - 20 30 Thr Thr Gln Thr Gln Val Gln Arg Glu Ile Val Asn Lys His Asn Glu 35 40 45 Leu Arg Arg Ala Val Ser Pro Pro Ala Arg Asn Met Leu Lys Met Glu 55 60 Trp Asn Lys Glu Ala Ala Ala Asn Ala Gln Lys Trp Ala Asn Gln Cys 75 70 Asn Tyr Arg His Ser Asn Pro Lys Asp Arg Met Thr Ser Leu Lys Cys 90

Gly Glu Asn Leu Tyr Met Ser Ser Ala Ser Ser Ser Trp Ser Gln Ala 105 Ile Gln Ser Trp Phe Asp Glu Tyr Asn Asp Phe Asp Phe Gly Val Gly 120 125 Pro Lys Thr Pro Asn Ala Val Val Gly His Tyr Thr Gln Val Val Trp 135 140 Tyr Ser Ser Tyr Leu Val Gly Cys Gly Asn Ala Tyr Cys Pro Asn Gln 145 150 155 Lys Val Leu Lys Tyr Tyr Tyr Val Cys Gln Tyr Cys Pro Ala Gly Asn 165 170 175 Trp Ala Asn Arg Leu Tyr Val Pro Tyr Glu Gln Gly Ala Pro Cys Ala 185 190 Ser Cys Pro Asp Asn Cys Asp Asp Gly Leu Cys Thr Asn Gly Cys Lys 200 Tyr Glu Asp Leu Tyr Ser Asn Cys Lys Ser Leu Lys Leu Thr Leu Thr 215 220 Cys Lys His Gln Leu Val Arg Asp Ser Cys Lys Ala Ser Cys Asn Cys 225 230 Ser Asn Ser Ile Tyr * 245

<210> 1526 <211> 47 <212> PRT <213> Homo sapiens

.<210> 1527
<211> 118
<212> PRT
<213> Homo sapiens

<400> 1527

Met Ser Ala Arg Gly Trp Pro Cys Glu Ala Phe Val Leu Ala Gln Val 10 Cys Trp Cys Trp Leu Cys Val Arg Gly Arg Leu Cys Glu Ala Leu Thr 25 Leu Ala Gln Val Arg Arg His Gln Val Cys Val Pro Gly Gln Pro Cys 40 Glu Ala Leu Thr Leu Thr Gln Val Arg Arg His Gln Leu Cys Val Trp 55 60 Gly Arg Pro Cys Glu Ala Leu Thr Leu Ala Gln Val Cys Trp Leu Trp 70 75 Leu Cys Val Gln Gly Trp Pro His Glu Ala Leu Thr Leu Ala Gln Val 8.5 90 Arg Gln His Gln Val Cys Val Arg Gly Arg Pro Cys Glu Ala Leu Ser

Leu Ala Gln Val Arg *
115 117

<210> 1528 <211> 92 <212> PRT <213> Homo sapiens

<400> 1528

Met Lys Val Ser Ala Ala Ala Leu Ala Val Ile Leu Ile Ala Thr Ala 10 Leu Cys Ala Pro Ala Ser Ala Ser Pro Tyr Ser Ser Asp Thr Thr Pro 20 25 Cys Cys Phe Ala Tyr Ile Ala Arg Pro Leu Pro Arg Ala His Ile Lys 35 40 Glu Tyr Phe Tyr Thr Ser Gly Lys Cys Ser Asn Pro Ala Val Val Phe 55 60 Val Thr Arg Lys Asn Arg Gln Val Cys Ala Asn Pro Glu Lys Lys Trp 75 70 Val Arg Glu Tyr Ile Asn Ser Leu Glu Met Ser 85 90 91

<210> 1529 <211> 71 <212> PRT <213> Homo sapiens

<210> 1530 <211> 85 <212> PRT <213> Homo sapiens

<210> 1531 <211> 60 <212> PRT <213> Homo sapiens

<210> 1532 <211> 53 <212> PRT <213> Homo sapiens

<210> 1533 <211> 741 <212> PRT <213> Homo sapiens

Trp Lys Leu Val Ser Glu Met Lys Ala Glu Asn Ile Lys Ser Phe Leu Arg Ser Phe Thr Lys Leu Pro His Leu Ala Gly Thr Glu Gln Asn Phe Leu Leu Ala Lys Lys Ile Gln Thr Gln Trp Lys Lys Phe Gly Leu Asp Ser Ala Lys Leu Val His Tyr Asp Val Leu Leu Ser Tyr Pro Asn Glu Thr Asn Ala Asn Tyr Ile Ser Ile Val Asp Glu His Glu Thr Glu Ile Phe Lys Thr Ser Tyr Leu Glu Pro Pro Pro Asp Gly Tyr Glu Asn Val Thr Asn Ile Val Pro Pro Tyr Asn Ala Phe Ser Ala Gln Gly Met Pro Glu Gly Asp Leu Val Tyr Val Asn Tyr Ala Arg Thr Glu Asp Phe Phe Lys Leu Glu Arg Glu Met Gly Ile Asn Cys Thr Gly Lys Ile Val Ile Ala Arg Tyr Gly Lys Ile Phe Arg Gly Asn Lys Val Lys Asn Ala Met Leu Ala Gly Ala Ile Gly Ile Ile Leu Tyr Ser Asp Pro Ala Asp Tyr Phe Ala Pro Glu Val Gln Pro Tyr Pro Lys Gly Trp Asn Leu Pro Gly Thr Ala Ala Gln Arg Gly Asn Val Leu Asn Leu Asn Gly Ala Gly Asp Pro Leu Thr Pro Gly Tyr Pro Ala Lys Glu Tyr Thr Phe Arg Leu Asp Val Glu Glu Gly Val Gly Ile Pro Arg Ile Pro Val His Pro Ile Gly Tyr Asn Asp Ala Glu Ile Leu Leu Arg Tyr Leu Gly Gly Ile Ala Pro Pro Asp Lys Ser Trp Lys Gly Ala Leu Asn Val Ser Tyr Ser Ile Gly Pro Gly Phe Thr Gly Ser Asp Ser Phe Arg Lys Val Arg Met His Val Tyr Asn Ile Asn Lys Ile Thr Arg Ile Tyr Asn Val Val Gly Thr Ile Arg Gly Ser Val Glu Pro Asp Arg Tyr Val Ile Leu Gly Gly His Arg Asp Ser Trp Val Phe Gly Ala Ile Asp Pro Thr Ser Gly Val Ala Val Leu Gln Glu Ile Ala Arg Ser Phe Gly Lys Leu Met Ser Lys Gly Trp Arg Pro Arg Arg Thr Ile Ile Phe Ala Ser Trp Asp Ala Glu Glu Phe Gly Leu Leu Gly Ser Thr Glu Trp Ala Glu Glu Asn Val Lys Ile Leu Gln Glu Arg Ser Ile Ala Tyr Ile Asn Ser Asp Ser Ser Ile Glu Gly Asn Tyr Thr Leu Arg Val Asp Cys Thr Pro Leu Leu Tyr Gln Leu Val Tyr Lys Leu Thr Lys Glu Ile Pro Ser Pro Asp Asp Gly Phe Glu Ser Lys Phe Leu Tyr Glu Ser Trp Val Glu Lys Asp Pro Ser Pro Glu Asn 490 495 Lys Asn Leu Pro Arg Ile Asn Lys Leu Gly Ser Gly Ser Asp Phe Glu

Ala Tyr Phe Gln Arg Leu Gly Ile Ala Ser Gly Arg Ala Arg Tyr Thr 520 Lys Asn Lys Lys Thr Asp Lys Tyr Ser Ser Tyr Pro Val Tyr His Thr 535 Ile Tyr Glu Thr Phe Glu Leu Val Glu Lys Phe Tyr Asp Pro Thr Phe 550 Lys Lys Gln Leu Ser Val Ala Gln Leu Arg Gly Ala Leu Val Tyr Glu 565 570 575 Leu Val Asp Ser Lys Ile Ile Pro Phe Asn Ile Gln Asp Tyr Ala Glu 580 585 590 Ala Leu Lys Asn Tyr Ala Ala Ser Ile Tyr Asn Leu Ser Lys Lys His 600 Asp Gln Gln Leu Thr Asp His Gly Val Ser Phe Asp Ser Leu Phe Ser 615 620 Ala Val Lys Asn Phe Ser Glu Ala Ala Ser Asp Phe His Lys Arg Leu 630 635 Ile Gln Val Asp Leu Asn Asn Pro Ile Ala Val Arg Met Met Asn Asp 645 650 Gln Leu Met Leu Leu Glu Arg Ala Phe Ile Asp Pro Leu Gly Leu Pro 660 665 670 Gly Lys Leu Phe Tyr Arg His Ile Ile Phe Ala Pro Ser Ser His Asn 680 685 Lys Tyr Ala Gly Glu Ser Phe Pro Gly Ile Tyr Asp Ala Ile Phe Asp 695 700 Ile Glu Asn Lys Ala Asn Ser Arg Leu Ala Trp Lys Glu Val Lys Lys 710 715 His Ile Ser Ile Ala Ala Phe Thr Ile Gln Ala Ala Ala Gly Thr Leu 730 Lys Glu Val Leu * 740

<210> 1534 <211> 50 <212> PRT <213> Homo sapiens

Thr *

<210> 1535 <211> 973 <212> PRT <213> Homo sapiens

<400> 1535
Met Val Lys Ser Lys Trp Gly Leu Ala Leu Ala Ala Val Val Thr Val

Leu Ser Ser Leu Leu Met Ser Val Gly Leu Cys Thr Leu Phe Gly Leu Thr Pro Thr Leu Asn Gly Gly Glu Ile Phe Pro Tyr Leu Val Val Val Ile Gly Leu Glu Asn Val Leu Val Leu Thr Lys Ser Val Val Ser Thr . 60 Pro Val Asp Leu Glu Val Lys Leu Arg Ile Ala Gln Gly Leu Ser Ser Glu Ser Trp Ser Ile Met Lys Asn Met Ala Thr Glu Leu Gly Ile Ile Leu Ile Gly Tyr Phe Thr Leu Val Pro Ala Ile Gln Glu Phe Cys Leu Phe Ala Val Val Gly Leu Val Ser Asp Phe Phe Leu Gln Met Leu Phe Phe Thr Thr Val Leu Ser Ile Asp Ile Arg Arg Met Glu Leu Ala Asp Leu Asn Lys Arg Leu Pro Pro Glu Ala Cys Leu Pro Ser Ala Lys Pro Val Gly Gln Pro Thr Arg Tyr Glu Arg Gln Leu Ala Val Arg Pro Ser Thr Pro His Thr Ile Thr Leu Gln Pro Ser Ser Phe Arg Asn Leu Arg Leu Pro Lys Arg Leu Arg Val Val Tyr Phe Leu Ala Arg Thr Arg Leu Ala Gln Arg Leu Ile Met Ala Gly Thr Val Val Trp Ile Gly Ile Leu Val Tyr Thr Asp Pro Ala Gly Leu Arg Asn Tyr Leu Ala Ala Gln Val Thr Glu Gln Ser Pro Leu Gly Glu Gly Ala Leu Ala Pro Met Pro Val Pro Ser Gly Met Leu Pro Pro Ser His Pro Asp Pro Ala Phe Ser Ile Phe Pro Pro Asp Ala Pro Lys Leu Pro Glu Asn Gln Thr Ser Pro Gly Glu Ser Pro Glu Arg Gly Gly Pro Ala Glu Val Val His Asp Ser Pro Val Pro Glu Val Thr Trp Gly Pro Glu Asp Glu Glu Leu Trp Arg Lys Leu Ser Phe Arg His Trp Pro Thr Leu Phe Ser Tyr Tyr Asn Ile Thr Leu Ala Lys Arg Tyr Ile Ser Leu Leu Pro Val Ile Pro Val Thr Leu Arg Leu Asn Pro Arg Glu Ala Leu Glu Gly Arg His Pro Gln Asp Gly Arg Ser Ala Trp Pro Pro Pro Gly Pro Ile Pro Ala Gly His Trp Glu Ala Gly Pro Lys Gly Pro Gly Gly Val Gln Ala His Gly Asp Val Thr Leu Tyr Lys Val Ala Ala Leu Gly Leu Ala Thr Gly Ile Val Leu Val Leu Leu Leu Cys Leu Tyr Arg Val Leu Cys Pro Arg Asn Tyr Gly Gln Leu Gly Gly Pro Gly Arg Arg Arg Gly Glu Leu Pro Cys Asp Asp Tyr Gly Tyr Ala Pro Pro Glu Thr Glu Ile Val Pro Leu Val Leu Arg Gly His Leu Met Asp Ile Glu Cys Leu Ala Ser Asp Gly Met

Leu Leu Val Ser Cys Cys Leu Ala Gly His Val Cys Val Trp Asp Ala Gln Thr Gly Asp Cys Leu Thr Arg Ile Pro Arg Pro Gly Arg Gln Arg Arg Asp Ser Gly Val Gly Ser Gly Leu Glu Ala Gln Glu Ser Trp Glu Arg Leu Ser Asp Gly Gly Lys Ala Gly Pro Glu Glu Pro Gly Asp Ser Pro Pro Leu Arg His Arg Pro Arg Gly Pro Pro Pro Pro Ser Leu Phe Gly Asp Gln Pro Asp Leu Thr Cys Leu Ile Asp Thr Asn Phe Ser Ala Gln Pro Arg Ser Ser Gln Pro Thr Gln Pro Glu Pro Arg His Arg Ala Val Cys Gly Arg Ser Arg Asp Ser Pro Gly Tyr Asp Phe Ser Cys Leu Val Gln Arg Val Tyr Gln Glu Glu Gly Leu Ala Ala Val Cys Thr Pro Ala Leu Arg Pro Pro Ser Pro Gly Pro Val Leu Ser Gln Ala Pro Glu Asp Glu Gly Gly Ser Pro Glu Lys Gly Ser Pro Ser Leu Ala Trp Ala Pro Ser Ala Glu Gly Ser Ile Trp Ser Leu Glu Leu Gln Gly Asn Leu Ile Val Val Gly Arg Ser Ser Gly Arg Leu Glu Val Trp Asp Ala Ile Glu Gly Val Leu Cys Cys Ser Ser Glu Glu Val Ser Ser Gly Ile Thr Ala Leu Val Phe Leu Asp Lys Arg Ile Val Ala Ala Arg Leu Asn Gly Ser Leu Asp Phe Phe Ser Leu Glu Thr His Thr Ala Leu Ser Pro Leu Gln Phe Arg Gly Thr Pro Gly Arg Gly Ser Ser Pro Ala Ser Pro Val Tyr Ser Ser Ser Asp Thr Val Ala Cys His Leu Thr His Thr Val Pro Cys Ala His Gln Lys Pro Ile Thr Ala Leu Lys Ala Ala Ala Gly Arg Leu Val Thr Gly Ser Gln Asp His Thr Leu Arg Val Phe Arg Leu Glu Asp Ser Cys Cys Leu Phe Thr Leu Gln Gly His Ser Gly Ala Ile Thr Thr Val Tyr Ile Asp Gln Thr Met Val Leu Ala Ser Gly Gln Asp Gly Ala Ile Cys Leu Trp Asp Val Leu Thr Gly Ser Arg Val Ser His Val Phe Ala His Arg Gly Asp Val Thr Ser Leu Thr Cys Thr Thr Ser Cys Val Ile Ser Ser Gly Leu Asp Asp Leu Ile Ser Ile Trp Asp Arg Ser Thr Gly Ile Lys Phe Tyr Ser Ile Gln Gln Asp Leu Gly Cys Gly Ala Ser Leu Gly Val Ile Ser Asp Asn Leu Leu Val Thr Gly Gly Gln Gly Cys Val Ser Phe Trp Asp Leu Asn Tyr Gly Asp Leu Leu Gln Thr Val Tyr Leu Gly Lys Asn Ser Glu Ala Gln Pro Ala Arg Gln Ile Leu Val Leu Asp Asn Ala Ala Ile Val Cys Asn Phe Gly Ser Glu Leu Ser

945 950 955 960 Leu Val Tyr Val Pro Ser Val Leu Glu Lys Leu Asp * 965 970 972

<210> 1536 <211> 75 <212> PRT <213> Homo sapiens

<400> 1536

Met Cys Leu Leu Lys Ala Ala Pro Phe Phe Phe Phe Tyr Val Pro Gln 10 Val Gly Lys Gly Asn Pro Arg Pro Pro Arg Gly Cys Ser Ala Phe His 20 25 Pro Pro Thr His Leu Arg Pro Gly Ser Cys Ser Val Ala Gln Ala Gly 35 40 45 Val Gln Trp Arg Ser Leu Gly Ser Ile Ala Ala Ser Val Ser Trp Val 55 Gln Ala Ile Leu Leu Pro Gln Pro Leu Glu * 70

<210> 1537 <211> 96 <212> PRT <213> Homo sapiens

<400> 1537

Met Asp Leu Gly Arg Val Phe Ile Thr Leu Ile Leu Asn Leu Leu Arg 10 Glu Thr Ile Phe Lys Arg Asp Gln Ser Pro Glu Pro Lys Val Pro Glu 20 25 30 Gln Ser Val Lys Glu Asp Arg Lys Leu Cys Glu Arg Pro Leu Ala Ser 35 40 Ser Pro Pro Arg Leu Tyr Glu Asp Asp Glu Thr Pro Gly Ala Leu Ser 55 Gly Leu Thr Asn Met Ala Val Ile Gln Ile Asp Gly His Met Ser Gly 70 Gln Met Val Lys His Leu Met Asn Ser Met Met Lys Leu Cys Val Met 85

<210> 1538 <211> 318 <212> PRT <213> Homo sapiens

<400> 1538 Met Val Met Arg Pro Leu Trp Ser Leu Leu Leu Trp Glu Ala Leu Leu

Pro Ile Thr Val Thr Gly Ala Gln Val Leu Ser Lys Val Gly Gly Ser 20 25 Val Leu Leu Val Ala Ala Arg Pro Pro Gly Phe Gln Val Arg Glu Ala 35 40 45 Ile Trp Arg Ser Leu Trp Pro Ser Glu Glu Leu Leu Ala Thr Phe Phe 55 60 Arg Gly Ser Leu Glu Thr Leu Tyr His Ser Arg Phe Leu Gly Arg Ala 75 70 Gln Leu His Ser Asn Leu Ser Leu Glu Leu Gly Pro Leu Glu Ser Gly 85 90 Asp Ser Gly Asn Phe Ser Val Leu Met Val Asp Thr Arg Gly Gln Pro 100 105 110 Trp Thr Gln Thr Leu Gln Leu Lys Val Tyr Asp Ala Val Pro Arg Pro 120 125 Val Val Gln Val Phe Ile Ala Val Glu Arg Asp Ala Gln Pro Ser Lys 135 Thr Cys Gln Val Phe Leu Ser Cys Trp Ala Pro Asn Ile Ser Glu Ile 150 155 Thr Tyr Ser Trp Arg Arg Glu Thr Thr Met Asp Phe Gly Met Glu Pro 165 170 His Ser Leu Phe Thr Asp Gly Gln Val Leu Ser Ile Ser Leu Gly Pro 180 185 Gly Asp Arg Asp Val Ala Tyr Ser Cys Ile Val Ser Asn Pro Val Ser 195 200 205 Trp Asp Leu Ala Thr Val Thr Pro Trp Asp Ser Cys His His Glu Ala 215 220 Ala Pro Gly Lys Ala Ser Tyr Lys Asp Val Leu Leu Val Val Pro 230 235 Val Ser Leu Leu Met Leu Val Thr Leu Phe Ser Ala Trp His Trp 245 250 Cys Pro Cys Ser Gly Pro His Leu Arg Ser Lys Gln Leu Trp Met Arg 260 265 270 Trp Asp Leu Gln Leu Ser Leu His Lys Val Thr Leu Ser Asn Leu Ile 280 Ser Thr Val Val Cys Ser Val Val His Gln Gly Leu Val Glu Gln Ile 295 His Thr Ala Leu Ile Lys Phe Pro Ser Leu Met Lys Lys 310

<210> 1539 <211> 157 <212> PRT <213> Homo sapiens

<400> 1539

 Met
 Ile
 Leu
 Gln
 Val
 Ser
 Gly
 Pro
 Trp
 Thr
 Val
 Leu
 Thr
 Ala
 Leu
 Thr
 Ala

 Leu
 Leu
 Met
 Val
 Leu
 Leu
 Ile
 Ser
 Val
 Val
 Gln
 Ser
 Arg
 Ala
 Thr
 Pro

 Glu
 Asn
 Ser
 Val
 Tyr
 Gln
 Glu
 Cys
 Tyr
 Ala
 Phe
 Asn
 Gly

 Glu
 Asn
 Ser
 Val
 Tyr
 Glu
 Leu
 Ile
 Tyr
 Asn
 Arg
 Glu
 Tyr
 Asn
 Gly
 Tyr
 Asn
 Arg
 Glu
 Tyr
 Val
 Tyr
 Tyr
 Val
 Tyr
 Tyr
 Tyr
 Tyr

| Solution | Solution

<210> 1540 <211> 135 <212> PRT <213> Homo sapiens

<400> 1540 Met Gly Ser Ser Phe Ile Leu Ala Leu Leu Leu Ala Val Leu Gln Gly 10 Leu Ser Ala Gly Val Leu Leu Glu Gln Ser Arg Ala Glu Val Lys Lys 20 25 Pro Gly Glu Ser Leu Lys Ile Ser Cys Lys Ala Ser Gly Tyr Arg Phe 3.5 40 45 Thr Ser Ala Trp Ile Ala Trp Val Arg Gln Met Pro Gly Lys Gly Leu 55 60 Glu Trp Met Gly Thr Ile Tyr Pro Ala Asp Ser Glu Val Arg Tyr Ser 70 Pro Ser Leu Gln Gly Gln Val Thr Leu Ser Val Asp Glu Ser Ile Ser 85 90 Thr Ala Tyr Leu Gln Trp Asn Ser Leu Arg Ala Ser Asp Thr Ala Thr 105 110 Tyr Tyr Cys Ala Arg Gln Ile Ile Gly Ala Leu Pro Thr Asp Pro Phe 120 115 Asp Leu Leu Gly Gln Gly Thr 135

<210> 1541 <211> 72 <212> PRT <213> Homo sapiens

<210> 1542 <211> 369 <212> PRT <213> Homo sapiens

<400> 1542 Met Ala Pro Arg Thr Leu Val Leu Leu Leu Ser Gly Ala Leu Ala Leu 10 Thr Gln Thr Trp Ala Gly Ser His Ser Met Arg Tyr Phe Phe Thr Ser 2.0 25 Val Ser Arg Pro Gly Arg Gly Glu Pro Arg Phe Ile Ala Val Gly Tyr 40 45 Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala Ala Ser Gln 55 Arg Met Glu Pro Arg Ala Pro Trp Ile Glu Gln Glu Gly Pro Glu Tyr 70 75 Trp Asp Gly Glu Thr Arg Lys Val Lys Ala His Ser Gln Thr His Arg 8.5 90 Val Asp Leu Gly Thr Leu Arg Gly Tyr Tyr Asn Gln Ser Glu Ala Gly 100 105 Ser His Thr Val Gln Arg Met Tyr Gly Cys Asp Val Gly Ser Asp Trp 115 120 125 Arg Phe Leu Arg Gly Tyr His Gln Tyr Ala Tyr Asp Gly Lys Asp Tyr 1.35 1.40 Ile Ala Leu Lys Glu Asp Leu Arg Ser Trp Thr Ala Ala Asp Met Ala 150 155 Ala Gln Thr Thr Lys His Lys Trp Glu Ala Ala His Val Ala Glu Gln 165 170 175 Leu Arg Ala Tyr Leu Glu Gly Thr Cys Val Glu Trp Leu Arg Arg Tyr 180 185 190 Leu Glu Asn Gly Lys Glu Thr Leu Gln Arg Thr Asp Ala Pro Lys Thr 200 205 His Met Thr His His Pro Ile Ser Asp His Glu Ala Thr Leu Arg Cys 215 220 Trp Ala Leu Ser Phe Tyr Pro Ala Glu Ile Thr Leu Thr Trp Gln Arg 230 235 Asp Gly Glu Asp Gln Thr Gln Asp Thr Glu Leu Val Glu Thr Arg Pro 245 250 Ala Gly Asp Gly Thr Phe Gln Lys Trp Ala Ala Val Val Pro Ser 260 265 270 Gly Gln Glu Gln Arg Tyr Thr Cys His Val Gln His Glu Gly Leu Pro 275 280 285 Lys Pro Leu Thr Leu Arg Trp Glu Pro Ser Ser Gln Pro Thr Ile Pro 290 295 300 Ile Val Gly Ile Ile Ala Gly Leu Val Leu Phe Gly Ala Val Ile Thr 310 315 Gly Ala Val Val Ala Ala Val Met Trp Arg Arg Lys Ser Ser Asp Arg 325 330 Lys Gly Val Lys Asp Arg Lys Gly Gly Ser Tyr Ser Gln Ala Ala Ser 340 345 350 Ser Asp Ser Ala Gln Gly Ser Asp Val Ser Leu Thr Ala Cys Lys Val 365

<210> 1543 <211> 49 <212> PRT <213> Homo sapiens

<400> 1543

<210> 1544 <211> 121 <212> PRT <213> Homo sapiens

<400> 1544

Met Lys Ile Phe Lys Cys Tyr Phe Lys His Thr Leu Gln Gln Lys Val 1 5 10 Phe Ile Leu Phe Leu Thr Leu Trp Leu Leu Ser Leu Leu Lys Leu Leu 20 25 Asn Val Arg Arg Leu Phe Pro Gln Lys Asp Ile Tyr Leu Val Glu Tyr 35 40 45 Ser Leu Ser Thr Ser Pro Phe Val Arg Asn Arg Tyr Thr His Val Lys 55 60 Asp Glu Val Arg Tyr Glu Val Asn Cys Ser Gly Ile Tyr Glu Gln Glu 75 70 Pro Leu Glu Ile Gly Lys Ser Leu Glu Ile Arg Arg Arg Asp Ile Ile 85 90 95 Asp Leu Glu Asp Asp Asp Val Val Ala Met Thr Ser Asp Cys Asp Ile 100 105 Tyr Gln Thr Leu Lys Gly Tyr Ala * 115 120

<210> 1545 <211> 70 <212> PRT <213> Homo sapiens

Gln Pro Gly Gln Val * 65 69

<210> 1546 <211> 58 <212> PRT <213> Homo sapiens

55 57

<210> 1547 <211> 65 <212> PRT <213> Homo sapiens

50

<210> 1548 <211> 78 <212> PRT <213> Homo sapiens

65 70 75 77

<210> 1549 <211> 54 <212> PRT <213> Homo sapiens

<210> 1550 <211> 70 <212> PRT <213> Homo sapiens

<210> 1551 <211> 224 <212> PRT <213> Homo sapiens

 Act of the control o

Ala Ser Asn Pro Thr Glu Pro Ala Thr Ile Ile Phe Thr Ala Ala Arg 90 85 Glu Gly Arg Glu Thr Leu Lys Cys Leu Ser His His Val Ala Asp Ala 110 105 100 Tyr Thr Ser Ser Gln Lys Val Ser Pro Ile Gln Ile Asp Gly Ala Gly 120 125 Arg Thr Trp Gln Asp Ser Asp Thr Val Lys Leu Leu Val Asp Leu Glu 135 140 Leu Ser Tyr Gly Phe Glu Asn Gly Gln Lys Ala Ala Val Val His His 150 155 Phe Glu Ser Phe Pro Ala Gly Ser Thr Leu Ile Phe Tyr Lys Tyr Cys 165 170 175 Asp His Glu Asn Ala Ala Phe Lys Asp Val Ala Leu Val Leu Thr Val 190 180 185 Leu Leu Glu Glu Glu Thr Leu Glu Ala Ser Val Gly Pro Arg Glu Thr 200 205 Glu Glu Lys Val Arg Asp Leu Leu Trp Ala Lys Phe Thr Asn Ser * 215 220 223

<210> 1552 <211> 57 <212> PRT

<213> Homo sapiens

<210> 1553 <211> 241 <212> PRT <213> Homo sapiens

<400> 1553 Met Ser Cys Val Leu Gly Gly Val Ile Pro Leu Gly Leu Leu Phe Leu 10 Val Cys Gly Ser Gln Gly Tyr Leu Leu Pro Asn Val Thr Leu Leu Glu 25 20 Glu Leu Leu Ser Lys Tyr Gln His Asn Glu Ser His Ser Arg Val Arg 45 40 Arg Ala Ile Pro Arg Glu Asp Lys Glu Glu Ile Leu Met Leu His Asn 55 60 Lys Leu Arg Gly Gln Val Gln Pro Gln Ala Ser Asn Met Glu Tyr Met 70 75 Thr Trp Asp Asp Glu Leu Glu Lys Ser Ala Ala Ala Trp Ala Ser Gln 85 90 Cys Ile Trp Glu His Gly Pro Thr Ser Leu Leu Val Ser Ile Gly Gln

100 105 110 Asn Leu Gly Ala His Trp Gly Arg Tyr Arg Ser Pro Gly Phe His Val 115 120 125 Gln Ser Trp Tyr Asp Glu Val Lys Asp Tyr Thr Tyr Pro Tyr Pro Ser 135 140 Glu Cys Asn Pro Trp Cys Pro Glu Arg Cys Ser Gly Pro Met Cys Thr 150 155 His Tyr Thr Gln Ile Val Trp Ala Thr Thr Asn Lys Ile Gly Cys Ala 165 170 175 Val Asn Thr Cys Arg Lys Met Thr Val Trp Gly Glu Val Trp Glu Asn 185 190 180 Ala Val Tyr Phe Val Cys Asn Tyr Ser Pro Lys Gly Asn Trp Ile Gly 200 Glu Ala Pro Tyr Lys Asn Gly Arg Pro Cys Ser Glu Cys Pro Pro Ser 215 220 Tyr Gly Gly Ser Cys Arg Asn Asn Leu Cys Tyr Arg Glu Glu Thr Tyr 230 235 241

<210> 1554 <211> 56 <212> PRT <213> Homo sapiens

<210> 1555 <211> 64 <212> PRT <213> Homo sapiens

<210> 1556

<211> 71 <212> PRT <213> Homo sapiens

<210> 1557 <211> 126 <212> PRT <213> Homo sapiens

<400> 1557 Met Gln Thr His Leu Gly Ala Ser Cys Leu Ser Leu Val Ile Arg Ile 10 Ala Leu Leu Phe Leu Val Gln Arg Asp Gly His Leu His Ser Arg Arg 25 30 20 Glu Ile Tyr Ala Ile Phe Thr Lys Gly Ser Leu Cys Pro Ala Phe Lys 45 35 40 Trp Ala Arg Val Gly Arg Glu Leu Phe Leu His Leu Leu Leu Ser Asn 55 60 Cys His Gln Leu Lys Ile Ile Leu Ile Pro Lys Cys His Ile Leu Gly 70 Trp His Ile Leu Ile Pro Phe Thr Ser Lys Ile Trp Asp Ser Tyr Phe 90 85 Ile Val Gln Cys Phe Ser His Phe Thr Thr Leu Ala Asn Val Phe Met 105 100 Glu Glu Asp Asn Pro Val Ser Glu Leu Gln Val Phe Gln * 115 120

<210> 1558 <211> 135 <212> PRT <213> Homo sapiens

<210> 1559 <211> 203 <212> PRT <213> Homo sapiens

<400> 1559 Met Glu Leu Trp Gly Ala Tyr Leu Leu Leu Cys Leu Phe Ser Leu Leu 10 Thr Gln Val Thr Thr Glu Pro Pro Thr Gln Lys Pro Lys Lys Ile Val Asn Ala Lys Lys Asp Val Val Asn Thr Lys Met Phe Glu Glu Leu Lys 40 Ser Arg Leu Asp Thr Leu Ala Gln Glu Val Ala Leu Leu Lys Glu Gln 55 60 Gln Ala Leu Gln Thr Val Cys Leu Lys Gly Thr Lys Val His Met Lys 70 75 Cys Phe Leu Ala Phe Thr Gln Thr Lys Thr Phe His Glu Ala Ser Glu 85 90 Asp Cys Ile Ser Arg Gly Gly Thr Leu Ser Thr Pro Gln Thr Gly Ser Glu Asn Asp Ala Leu Tyr Glu Tyr Leu Arg Gln Ser Val Gly Asn Glu 115 120 125 Ala Glu Ile Trp Leu Gly Leu Asn Asp Met Ala Ala Glu Gly Thr Trp 135 Val Asp Met Thr Gly Ala Arg Ile Ala Tyr Lys Asn Trp Glu Thr Glu 150 155 Ile Thr Ala Gln Pro Asp Gly Gly Lys Thr Glu Asn Cys Ala Val Leu 170 175 Ser Gly Ala Ala Asn Gly Lys Trp Phe Asp Lys Arg Cys Arg Asp Gln 185 Leu Pro Tyr Ile Cys Gln Phe Gly Ile Val *

<210> 1560 <211> 59 <212> PRT <213> Homo sapiens

<400> 1560
Met Met Gly Val Ser Gly Cys Met Val Leu Leu Ala Pro Leu Leu Ala
1 5 10 15

<210> 1561 <211> 50 <212> PRT <213> Homo sapiens

<210> 1562 <211> 49 <212> PRT <213> Homo sapiens

<210> 1563 <211> 69 <212> PRT <213> Homo sapiens

50 55 60 His Lys Gln Pro * 65 68

<210> 1564 <211> 53 <212> PRT <213> Homo sapiens

<210> 1565 <211> 236 <212> PRT <213> Homo sapiens

<400> 1565 Met Pro Arg Arg Gly Leu Ile Leu His Thr Arg Thr His Trp Leu Leu 10 Leu Gly Leu Ala Leu Leu Cys Ser Leu Val Leu Phe Met Tyr Leu Leu 20 25 Glu Cys Ala Pro Gln Thr Asp Gly Asn Ala Ser Leu Pro Gly Val Val 40 Gly Glu Asn Tyr Gly Lys Glu Tyr Tyr Gln Ala Leu Leu Gln Glu Gln 55 60 Glu Glu His Tyr Gln Thr Arg Ala Thr Ser Leu Lys Arg Gln Ile Ala 75 Gln Leu Lys Gln Glu Leu Gln Glu Met Ser Glu Lys Met Arg Ser Leu 90 Gln Glu Arg Arg Asn Val Gly Ala Asn Gly Ile Gly Tyr Gln Ser Asn 105 Lys Glu Gln Ala Pro Ser Asp Leu Leu Glu Phe Leu His Ser Gln Ile 120 Asp Lys Ala Glu Val Ser Ile Gly Ala Lys Leu Pro Ser Glu Tyr Gly 135 Val Ile Pro Phe Glu Ser Phe Thr Leu Met Lys Val Phe Gln Leu Glu 150 155 Met Gly Leu Thr Arg His Pro Glu Glu Lys Pro Val Arg Lys Asp Lys 165 170 175 Arg Asp Glu Leu Val Glu Val Ile Glu Ala Gly Leu Glu Val Ile Asn 185 Asn Pro Asp Glu Asp Glu Glu Glu Asp Glu Glu Gly Pro Leu Gly 200 205 Glu Lys Leu Ile Phe Asn Glu Asn Asp Phe Val Glu Gly Tyr Tyr Arg

Thr Glu Arg Asp Lys Gly Thr Gln Tyr Glu Leu Phe 225 230

<210> 1566 <211> 77 <212> PRT <213> Homo sapiens

<400> 1566

Met Thr Ala Gly Ile Met Pro Leu Gly Leu Cys Pro Cys Ser Cys Leu 10 Cys Leu His Ser Arg Thr Gly Ala Phe Ser Ala Val His Trp Ser Pro 20 25 Val Glu Gly Thr Pro Asp Pro Ser Leu Arg Glu Val Ile Ser Lys Gly 35 40 Cys Phe Ile Thr Val Phe Pro Gln Asn Asp Pro Ile Asp Thr Val Phe 50 55 Ser Gln Cys Pro Leu Thr Phe Glu His Ile Arg Glu * 70

<210> 1567 <211> 104 <212> PRT <213> Homo sapiens

<400> 1567

Met Leu Ile Gly Leu Leu Ala Trp Leu Gln Thr Val Pro Ala His Gly 1 5 Cys Gln Phe Leu Pro Ile Thr Ser Val Thr Ala Thr Val Tyr His Leu
20 25 30 10 Pro Val His Gln Leu Lys Gly Arg Ser Arg Val Gln Lys Asn Leu Thr 40 Leu Asp Asn Glu Gly Glu Gly Thr Trp Thr Thr Cys Leu Glu Phe Leu 55 Glu Ser Leu Ala Gly Trp Arg Leu Gly Trp Gly Val Ser Arg Gly Val 70 75 Arg Glu Trp Leu Cys Leu Gln Gln Val Ser Leu His Gln Thr Pro Gly 85 Leu Pro His Lys Gln Asp Leu * 100 103

<210> 1568 <211> 46 <212> PRT <213> Homo sapiens

<400> 1568 Met Val Val Asn Thr Met Ile Tyr Phe Phe Ile Phe Thr Tyr Thr Leu 1 5 10 15 Ala Lys Arg Ala Arg Val His Ile Asn Lys Asn Gly Asn Lys Ala Leu

20 Ala Glu Lys Asn Met His Leu Thr Asn His Val Asn Ser * 35 . 40 <210> 1569 <211> 50 <212> PRT <213> Homo sapiens <400> 1569 Met Leu Met Met Asp Thr Leu Trp Pro Ile Leu Leu Gln Thr Leu Lys 10 Val Ile Ser Gln Val Gly His Ala Gly Pro Leu Ala Asn Met Ile His 20 25 30 Asp Asn Pro Cys Ile Ile Ala Tyr Arg Ile Thr Leu Arg Leu Val Gly 35 40 Pro * 49 <210> 1570 <211> 50 <212> PRT <213> Homo sapiens <400> 1570 Met Val Gly Phe Asp Leu Leu Pro Leu Leu Phe Phe Pro Phe Phe 10 Pro Ser Leu Ile Phe Phe Pro Phe Phe Ser Ser Pro Ser Pro Ser Phe 20 25 30 Gln Phe Leu Pro His Gln Glu Lys Ser Gln His Val Phe Pro Pro Asn 35 40 Ala * 49 <210> 1571 <211> 50 <212> PRT <213> Homo sapiens <400> 1571 Met Tyr Leu Trp Val Val Arg Trp Lys Trp Cys Leu Gln Lys Leu Gly 5 Arg Arg Ile Leu Leu His Ser Leu His Asp Val Phe Ile Ala Asn Met 20 25 30 Asp Asp Lys Gly Leu Cys Tyr Arg Gly Leu Arg Ala Pro Ser Phe Leu 40 Leu * 49

<210> 1572 <211> 80 <212> PRT <213> Homo sapiens

<400> 1572

<210> 1573 <211> 52 <212> PRT <213> Homo sapiens

<400> 1573

<210> 1574 <211> 200 <212> PRT <213> Homo sapiens

<400> 1574

Met Arg Leu Ser Leu Pro Leu Leu Leu Leu Leu Gly Ala Trp Ala 5 10 Ile Pro Gly Gly Leu Gly Val Met Ala Pro Leu Thr Ala Thr Ala Pro 20 25 Glu Val Asp Asp Glu Glu Met Tyr Ser Ala His Met Pro Ala His Leu 35 40 Arg Cys Asp Ala Cys Arg Ala Val Ala Tyr Gln Glu Cys Gly Pro Lys 55 Thr Leu Ala Lys Ala Glu Thr Lys Leu His Thr Ser Asn Ser Gly Gly 75 Arg Arg Asp Val Ser Glu Leu Val Tyr Thr Asp Val Leu Asp Arg Ser 85 90 Cys Ser Arg Asn Trp Gln Asp Tyr Gly Val Arg Glu Val Asp Gln Val

100 105 Lys Arg Leu Thr Gly Pro Gly Leu Ser Glu Gly Pro Glu Pro Ser Ile 115 120 Ser Val Met Val Thr Gly Gly Pro Trp His Thr Arg Leu Ser Arg Thr 135 140 Cys Leu His Tyr Leu Gly Glu Phe Gly Glu Asp Gln Ile Tyr Glu Ala 145 150 155 His Gln Gln Gly Arg Gly Ala Leu Glu Ala Leu Leu Cys Gly Gly Pro 165 170 175 Pro Gly Gly Leu Leu Arg Glu Gly Val Ser His Lys Arg Arg Ala Leu 180 185 190 Val Leu Asp Ser Thr Leu Leu * 195 199

<210> 1575
<211> 51
<212> PRT
<213> Homo sapiens
<221> misc_feature
<222> (1)...(51)
<223> Xaa = any amino acid or nothing

<210> 1576 <211> 124 <212> PRT <213> Homo sapiens

<400> 1576 Met Arg Ile Arg Leu Leu Cys Cys Val Ala Phe Ser Leu Leu Trp Ala 1 5 15 10 Gly Pro Val Ile Ala Gly Ile Thr Gln Ala Pro Thr Ser Gln Ile Leu 20 25 Ala Ala Gly Arg Arg Met Thr Leu Arg Cys Thr Gln Asp Met Arg His 35 45 Asn Ala Met Tyr Trp Tyr Arg Gln Asp Leu Gly Leu Gly Leu Arg Leu 50 55 60 Ile His Tyr Ser Asn Thr Ala Gly Thr Thr Gly Lys Gly Glu Val Pro 65 70 75 Asp Gly Tyr Ser Val Ser Arg Ala Asn Thr Asp Asp Phe Pro Leu Thr 85 90 Leu Ala Ser Ala Val Pro Ser Gln Thr Ser Val Tyr Phe Cys Ala Ser 100 105

Ser Asp Gly Ala Ser Gly Ser Pro His Thr Gly Glu 115 120 124

<210> 1577 <211> 860 <212> PRT <213> Homo sapiens

<400> 1577

Met Ala Cys Arg Trp Ser Thr Lys Glu Ser Pro Arg Trp Arg Ser Ala 10 Leu Leu Leu Phe Leu Ala Gly Val Tyr Gly Asn Gly Ala Leu Ala 20 Glu His Ser Glu Asn Val His Ile Ser Gly Val Ser Thr Ala Cys Gly 40 Glu Thr Pro Glu Gln Ile Arg Ala Pro Ser Gly Ile Ile Thr Ser Pro Gly Trp Pro Ser Glu Tyr Pro Ala Lys Ile Asn Cys Ser Trp Phe Ile 75 Arg Ala Asn Pro Gly Glu Ile Ile Thr Ile Ser Phe Gln Asp Phe Asp 90 Ile Gln Gly Ser Arg Arg Cys Asn Leu Asp Trp Leu Thr Ile Glu Thr 105 Tyr Lys Asn Ile Glu Ser Tyr Arg Ala Cys Gly Ser Thr Ile Pro Pro 115 120 125 Pro Tyr Ile Ser Ser Gln Asp His Ile Trp Ile Arg Phe His Ser Asp 135 140 Asp Asn Ile Ser Arg Lys Gly Phe Arg Leu Ala Tyr Phe Ser Gly Lys 150 155 Ser Glu Glu Pro Asn Cys Ala Cys Asp Gln Phe Arg Cys Gly Asn Gly 165 170 Lys Cys Ile Pro Glu Ala Trp Lys Cys Asn Asn Met Asp Glu Cys Gly 180 185 185 Asp Arg Ser Asp Glu Glu Ile Cys Ala Lys Glu Ala Asn Pro Pro Thr 200 Ala Ala Ala Phe Gln Pro Cys Ala Tyr Asn Gln Phe Gln Cys Leu Ser 215 220 Arg Phe Thr Lys Val Tyr Thr Cys Leu Pro Glu Ser Leu Lys Cys Asp 230 235 Gly Asn Ile Asp Cys Leu Asp Leu Gly Asp Glu Ile Asp Cys Asp Val 245 250 255 Pro Thr Cys Gly Gln Trp Leu Lys Tyr Phe Tyr Gly Thr Phe Asn Ser 260 265 Pro Asn Tyr Pro Asp Phe Tyr Pro Pro Gly Ser Asn Cys Thr Trp Leu 275 280 Ile Asp Thr Gly Asp His Arg Lys Val Ile Leu Arg Phe Thr Asp Phe 295 300 Lys Leu Asp Gly Thr Gly Tyr Gly Asp Tyr Val Lys Ile Tyr Asp Gly 305 310 315 Leu Glu Glu Asn Pro His Lys Leu Leu Arg Val Leu Thr Ala Phe Asp 325 330 Ser His Ala Pro Leu Thr Val Val Ser Ser Ser Gly Gln Ile Arg Val 345 His Phe Cys Ala Asp Lys Val Asn Ala Ala Arg Gly Phe Asn Ala Thr 360 Tyr Gln Val Asp Gly Phe Cys Leu Pro Trp Glu Ile Pro Cys Gly Gly

	370)				375	5				380	1			
Ası 38!	n Try 5	Gl;	у Суа	з Ту:	r Thi 390	c Glı	ı Glı	n Gli	ı Arç	g Cys	s Asp	Gly	у Туі	r Trp	His
Суя	s Pro	Ası	n Gly	/ Arg	g Asp		a Thi	c Ası	1 Cys	5 Thr	Met	Суя	s Glr		400 Glu
Gli	ı Phe	e Pro	Cys	s Se		J Ası	a Gly	/ Val	L Cys	Б Туг	Pro	Arg			Arg
Cys	s Asr	1 Ty:	r Glr		n His	суз	5 Pro	Ası	, i Gl	/ Ser	Asp			Asr	Cys
Phe	Phe 450	Су		Pro	Gly	Asr 459	ı Phe	His	Cys	Lys			a Arg	g Cys	. Val
Phe 465	e Glu		r Trp	Va]	L Cys	Asp		Glr	Asp			Gl _}	/ Asp	Gly	Ser
		Glı	ı Asn	Cys	Pro		. Ile	val	Pro	475 Thr	Arg	Val	Ile		480 Ala
Ala	Val	11ϵ	Gly 500	Ser	Leu	Ile	Cys	Gly 505	490 Leu	Leu	Leu	Val			Leu
Gly	Cys	Thr 515	Cys		Leu	Tyr	Ser 520	Leu		Met	Phe			Arg	Ser
Phe	Glu 530	Thr		Leu	Ser	Arg	Val	Glu	Ala	Glu		525 Leu	Arg	Arg	Glu
Ala 545	Pro	Pro	Ser	Tyr	Gly 550	Gln		Ile	Ala	Gln 555	540 Gly	Leu	Ile	Pro	
Val	Glu	Asp	Phe	Pro 565	Val		Ser	Pro	Asn 570	Gln	Ala	Ser	Val	Leu 575	560 Glu
Asn	Leu	Arg	Leu 580		Val	Arg	Ser	Gln 585	Leu	Gly	Phe	Thr	Ser 590	Val	Arg
Leu	Pro	Met 595	Ala	Gly	Arg	Ser	Ser 600	Asn	Ile	Trp	Asn	Arg 605	Ile	Phe	Asn
Phe	Al.a 610	Arg	Ser	Arg	His	Ser 615		Ser	Leu	Ala	Leu 620	Val	Ser	Ala	Aap
625					Pro 630					635	Arg				640
				645	Ser				650					655	Asp
			660		Arg			665					670	Val	
		675			Lys		680					685			
	690				Ser	695					700				
705					Asp 710					715					720
				725	Leu				730					735	
			740		Phe			745					750		
		755			Arg		760					765			
	770				Glu	775					780				
785					Asp 790					795					800
				805	Leu				810					815	Gly
			820		Arg			825					830	Ile	
HIS	Thr	Ala 835	GIn	Ile	Pro	Asp	Thr 840	Cys	Leu	Glu		Thr 845	Leu	Lys	Asn

Glu Thr Ser Asp Asp Glu Ala Leu Leu Leu Cys * 850 859

<210> 1578 <211> 58 <212> PRT <213> Homo sapiens

<210> 1579 <211> 572 <212> PRT <213> Homo sapiens

<400> 1579

Met Arg Arg Arg Ser Arg Met Leu Leu Cys Phe Ala Phe Leu Trp Val 10 15 Leu Gly Ile Ala Tyr Tyr Met Tyr Ser Gly Gly Gly Ser Ala Leu Ala 25 Gly Gly Ala Gly Gly Gly Ala Gly Arg Lys Glu Asp Trp Asn Glu Ile 40 Asp Pro Ile Lys Lys Lys Asp Leu His His Ser Asn Gly Glu Glu Lys 55 Ala Gln Ser Met Glu Thr Leu Pro Pro Gly Lys Val Arg Trp Pro Asp 70 Phe Asn Gln Glu Ala Tyr Val Gly Gly Thr Met Val Arg Ser Gly Gln 85 90 Asp Pro Tyr Ala Arg Asn Lys Phe Asn Gln Val Glu Ser Asp Lys Leu 100 105 110 Arg Met Asp Arg Ala Ile Pro Asp Thr Arg His Asp Gln Cys Gln Arg 120 125 Lys Gln Trp Arg Val Asp Leu Pro Ala Thr Ser Val Val Ile Thr Phe 135 140 His Asn Glu Ala Arg Ser Ala Leu Leu Arg Thr Val Val Ser Val Leu 150 155 Lys Lys Ser Pro Pro His Leu Ile Lys Glu Ile Ile Leu Val Asp Asp 165 170 175 Tyr Ser Asn Asp Pro Glu Asp Gly Ala Leu Leu Gly Lys Ile Glu Lys 180 185 190 Val Arg Val Leu Arg Asn Asp Arg Arg Glu Gly Leu Met Arg Ser Arg Val Arg Gly Ala Asp Ala Ala Gln Ala Lys Val Leu Thr Phe Leu Asp 215 220 Ser His Cys Glu Cys Asn Glu His Trp Leu Glu Pro Leu Leu Glu Arg

```
225
                  230
                                     235
Val Ala Glu Asp Arg Thr Arg Val Val Ser Pro Ile Ile Asp Val Ile
        245
                           250
Asn Met Asp Asn Phe Gln Tyr Val Gly Ala Ser Ala Asp Leu Lys Gly
          260
                            265
Gly Phe Asp Trp Asn Leu Val Phe Lys Trp Asp Tyr Met Thr Pro Glu
                         280
                                        285
Gln Arg Arg Ser Arg Gln Gly Asn Pro Val Ala Pro Ile Lys Thr Pro
                   295
                              300
Met Ile Ala Gly Gly Leu Phe Val Met Asp Lys Phe Tyr Phe Glu Glu
                 310
                                     315
Leu Gly Lys Tyr Asp Met Met Asp Val Trp Gly Gly Glu Asn Leu
              325
                                330
Glu Ile Ser Phe Arg Val Trp Gln Cys Gly Gly Ser Leu Glu Ile Ile
                            345
                                               350
Pro Cys Ser Arg Val Gly His Val Phe Arg Lys Gln His Pro Tyr Thr
                        360
                                    365
Phe Pro Gly Gly Ser Gly Thr Val Phe Ala Arg Asn Thr Arg Arg Ala
                     375
                                       380
Ala Glu Val Trp Met Asp Glu Tyr Lys Asn Phe Tyr Tyr Ala Ala Val
               390
                                   395
Pro Ser Ala Arg Asn Val Pro Tyr Gly Asn Ile Gln Ser Arg Leu Glu
              405
                                 410
Leu Arg Lys Lys Leu Ser Cys Lys Pro Phe Lys Trp Tyr Leu Glu Asn
          420
                            425
Val Tyr Pro Glu Leu Arg Val Pro Asp His Gln Asp Ile Ala Phe Gly
                         440
Ala Leu Gln Gln Gly Thr Asn Cys Leu Asp Thr Leu Gly His Phe Ala
                     455
Asp Gly Val Val Gly Val Tyr Glu Cys His Asn Ala Gly Gly Asn Gln
                 470
                                    475
🕬 Trp Ala Leu Thr Lys Glu Lys Ser Val Lys His Met Asp Leu Cys
             485
                               490 495
Leu Thr Val Val Asp Arg Ala Pro Gly Ser Leu Ile Lys Leu Gln Gly
                           505
                                              510
Cys Arg Glu Asn Asp Ser Arg Gln Lys Trp Glu Gln Ile Glu Gly Asn
                      520
                                 525
Ser Lys Leu Arg His Val Gly Ser Asn Leu Cys Leu Asp Ser Arg Thr
                    535
                                       540
Ala Lys Ser Gly Gly Leu Ser Val Glu Val Cys Gly Pro Ala Leu Ser
                 550
                                    555
Gln Gln Trp Lys Phe Thr Leu Asn Leu Gln Gln *
                                570 571
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<210> 1580 <211> 77 <212> PRT <213> Homo sapiens

Ala Pro Ala Asn Val Ala Lys Ile Gln Leu Arg Leu Ala Gly Gln Lys
50

Arg Lys His Ser Glu Gly Pro Gly Gly Gly Val Leu *
65

70

75

76

<210> 1581 <211> 494 <212> PRT <213> Homo sapiens

<400> 1581 Met Gly Ser Leu Gln Pro Leu Ala Thr Leu Tyr Leu Leu Gly Met Leu 5 10 Val Ala Ser Cys Leu Gly Arg Leu Ser Trp Tyr Asp Pro Asp Phe Gln 2.0 Ala Arg Leu Thr Arg Ser Asn Ser Lys Cys Gln Gly Gln Leu Glu Val 40 Tyr Leu Lys Asp Gly Trp His Met Val Cys Ser Gln Ser Trp Gly Arg 55 60 Ser Ser Lys Gln Trp Glu Asp Pro Ser Gln Ala Ser Lys Val Cys Gln 70 75 Arg Leu Asn Cys Gly Val Pro Leu Ser Leu Gly Pro Phe Leu Val Thr 85 90 Tyr Thr Pro Gln Ser Ser Ile Ile Cys Tyr Gly Gln Leu Gly Ser Phe 105 Ser Asn Cys Ser His Ser Arg Asn Asp Met Cys His Ser Leu Gly Leu 115 120 Thr Cys Leu Glu Pro Gln Lys Thr Thr Pro Pro Thr Thr Arg Pro Pro 135 Pro Thr Thr Pro Glu Pro Thr Ala Pro Pro Arg Leu Gln Leu Val 150 155 Ala Gln Ser Gly Gly Gln His Cys Ala Gly Val Val Glu Phe Tyr Ser 165 170 175 Gly Ser Leu Gly Gly Thr Ile Ser Tyr Glu Ala Gln Asp Lys Thr Gln 180 185 190 Asp Leu Glu Asn Phe Leu Cys Asn Asn Leu Gln Cys Gly Ser Phe Leu 195 200 205 Lys His Leu Pro Glu Thr Glu Ala Gly Arg Ala Gln Asp Pro Gly Glu 215 220 Pro Arg Glu His Gln Pro Leu Pro Ile Gln Trp Lys Ile Gln Asn Ser 230 235 Ser Cys Thr Ser Leu Glu His Cys Phe Arg Lys Ile Lys Pro Gln Lys 245 250 Ser Gly Arg Val Leu Ala Leu Leu Cys Ser Gly Phe Gln Pro Lys Val 260 265 Gln Ser Arg Leu Val Gly Gly Ser Ser Ile Cys Glu Gly Thr Val Glu 275 280 285 Val Arg Gln Gly Ala Gln Trp Ala Ala Leu Cys Asp Ser Ser Ser Ala 295 300 Arg Ser Ser Leu Arg Trp Glu Glu Val Cys Arg Glu Gln Gln Cys Gly 305 310 315 Ser Val Asn Ser Tyr Arg Val Leu Asp Ala Gly Asp Pro Thr Ser Arg 325 330 Gly Leu Phe Cys Pro His Gln Lys Leu Ser Gln Cys His Glu Leu Trp 340 345 Glu Arg Asn Ser Tyr Cys Lys Lys Val Phe Val Thr Cys Gln Asp Pro

Asn Pro Ala Gly Leu Ala Ala Gly Thr Val Ala Ser Ile Ile Leu Ala Leu Val Leu Leu Val Leu Leu Val Val Cys Gly Pro Leu Ala Tyr Lys Lys Leu Val Lys Lys Phe Arg Gln Lys Lys Gln Arg Gln Trp Ile Gly Pro Thr Gly Met Asn Gln Asn Met Ser Phe His Arg Asn His Thr Ala Thr Val Arg Ser His Ala Glu Asn Pro Thr Ala Ser His Val Asp Asn Glu Tyr Ser Gln Pro Pro Arg Asn Ser Arg Leu Ser Ala Tyr Pro Ala Leu Glu Gly Ala Leu His Arg Ser Ser Met Gln Pro Asp Asn Ser Ser Asp Ser Asp Tyr Asp Leu His Gly Ala Gln Arg Leu *

<210> 1582 <211> 329 <212> PRT <213> Homo sapiens

<400> 1582 Met Gln Gly Leu Cys Ile Ser Val Ala Val Phe Leu His Tyr Phe Leu Leu Val Ser Phe Thr Trp. Met Gly Leu Glu Ala Phe His Met Tyr Leu Ala Leu Val Lys Val Phe Asn Thr Tyr Ile Arg Lys Tyr Ile Leu Lys Phe Cys Ile Val Gly Trp Gly Val Pro Ala Val Val Val Thr Ile Ile Leu Thr Ile Ser Pro Asp Asn Tyr Gly Leu Gly Ser Tyr Gly Lys Phe Pro Asn Gly Ser Pro Asp Asp Phe Cys Trp Ile Asn Asn Asn Ala Val Phe Tyr Ile Thr Val Val Gly Tyr Phe Cys Val Ile Phe Leu Leu Asn Val Ser Met Phe Ile Val Val Leu Val Gln Leu Cys Arg Ile Lys Lys Lys Lys Gln Leu Gly Ala Gln Arg Lys Thr Ser Ile Gln Asp Leu Arg Ser Ile Ala Gly Leu Thr Phe Leu Leu Gly Ile Thr Trp Gly Phe Ala Phe Phe Ala Trp Gly Pro Val Asn Val Thr Phe Met Tyr Leu Phe Ala Ile Phe Asn Thr Leu Gln Gly Phe Phe Ile Phe Ile Phe Tyr Cys Val Ala Lys Glu Asn Val Arg Lys Gln Trp Arg Arg Tyr Leu Cys Cys Gly Lys Leu Arg Leu Ala Glu Asn Ser Asp Trp Ser Lys Thr Ala Thr Asn Gly Leu Lys Lys Gln Thr Val Asn Gln Gly Val Ser Ser Ser Asn Ser Leu Gln Ser Ser Ser Asn Ser Thr Asn Ser Thr Thr Leu Leu Val

Asn Asn Asp Cys Ser Val His Ala Ser Gly Asn Gly Asn Ala Ser Thr 260 265 Glu Arg Asn Gly Val Ser Phe Ser Val Gln Asn Gly Asp Val Cys Leu 275 280 285 His Asp Phe Thr Gly Lys Gln His Met Phe Asn Glu Lys Glu Asp Ser 290 295 300 Cys Asn Gly Lys Gly Arg Met Ala Leu Arg Arg Thr Ser Lys Arg Gly 305 310 315 Ser Leu His Phe Ile Glu Gln Met * 325 328

<210> 1583 <211> 49 <212> PRT <213> Homo sapien

<213> Homo sapiens

<210> 1584 <211> 671 <212> PRT <213> Homo sapiens

Leu Ala Asn Ser Ser Ser Pro Gln Val Glu Gly Asp Phe Ala Met Ala 35 40 40 45 Pro Arg Gly Pro Glu Gln Glu Glu Cys Glu Gly Leu Leu Gln Gln Trp 50 55 60 Arg Glu Gly Leu Ser Gln Val Leu Ser Thr Ala Ser Glu Gly Pro

65 70 75 80
Leu Ile Asp Lys Gly Leu Ala Gln Ser Ser Leu Ala Leu Leu Met Asp

85 90 Asn Pro Gly Glu Glu Asn Ala Ala Ser Glu Asp Arg Trp Ser Ser Arg

Asn Pro Gly Glu Glu Asn Ala Ala Ser Glu Asp Arg Trp Ser Ser Arg 100 105 110 Gln Leu Ser Asp Leu Arg Ala Ala Glu Asn Leu Asp Glu Pro Phe Pro

115 120 125 Glu Met Leu Gly Glu Glu Pro Leu Leu Glu Val Glu Gly Val Glu Gly 130 135 140

Ser Met Trp Ala Ala Ile Pro Met Gln Ser Glu Pro Gln Tyr Ala Asp 145 150 155 160

Cys Ala Ala Leu Pro Val Gly Ala Leu Ala Thr Glu Gln Trp Glu Glu

				165	;				170)				175	
Asp	Pro	Ala	Val 180	Leu		Trp	Ser	Ile 185	Ala		Glu	Pro	Val	Pro	Gln
Glu	Glu	Ala 195		Ile	Trp	Pro	Phe 200	Glu		Leu	Gly	Gln 205	Leu		Pro
Pro	Ala 210		Glu	Ile	Pro	Tyr 215		Glu	Ile	Leu	Trp	Arg		Trp	Glu
225					230					235				_	Gly 240
				245					250					255	
			Gln 260					265					270		
		275	Asn				280					285			
	290		Asp -			295					300				-
305			Leu		310					315					320
			Arg	325					330					335	
			Arg 340					345					350		
		355	Leu				360					365			
	370		Pro			375					380				
385			Val Leu		390					395					400
			Leu	405					410					415	
			420 Ser					425					430		
		435	Gln				440					445			
	450		Ser			455					460				
465			Ser		470					475					480
			Lys	485					490					495	
			500 Arg					505					510		
		515	Glu				520					525			
	530		Ser			535					540				
545			Thr		550					555					560
			His	565					570					575	
			580 Gly					585					590		
		595	Glu				600					605			
	610		Lys			615					620				-
625			,		630	,	- 9			635	u	~e1	u	JIU	640

Leu Trp Ala Ala Asn Gly Leu Pro Asn Pro Phe Cys Ser Ser Asp His 655

Leu Cys Leu Leu Ala Ser Leu Gly Met Glu Val Thr Ala Pro *
660 *

<210> 1585 <211> 318 <212> PRT <213> Homo sapiens

<400> 1585 Met Met Cys Leu Lys Ile Leu Arg Ile Ser Leu Ala Ile Leu Ala Gly 10 15 Trp Ala Leu Cys Ser Ala Asn Ser Glu Leu Gly Trp Thr Arg Lys Lys 2.0 25 Ser Leu Val Glu Arg Glu His Leu Asn Gln Val Leu Leu Glu Gly Glu 40 Arg Cys Trp Leu Gly Ala Lys Val Arg Arg Pro Arg Ala Ser Pro Gln 60 His His Leu Phe Gly Val Tyr Pro Ser Arg Ala Gly Asn Tyr Leu Arg 75 Pro Tyr Pro Val Gly Glu Gln Glu Ile His His Thr Gly Arg Ser Lys 85 90 Pro Asp Thr Glu Gly Asn Ala Val Ser Leu Val Pro Pro Asp Leu Thr 105 110 Glu Asn Pro Ala Gly Leu Arg Gly Ala Val Glu Glu Pro Ala Ala Pro 115 120 125 Trp Val Gly Asp Ser Pro Ile Gly Gln Ser Glu Leu Leu Gly Asp Asp 130 135 140 Asp Ala Tyr Leu Gly Asn Gln Arg Ser Lys Glu Ser Leu Gly Glu Ala 150 155 Gly Ile Gln Lys Gly Ser Ala Met Ala Ala Thr Thr Thr Ala Ile 165 Phe Thr Thr Leu Asn Glu Pro Lys Pro Glu Thr Gln Arg Arg Gly Trp 180 185 190 Ala Lys Ser Arg Gln Arg Arg Gln Val Trp Lys Arg Arg Ala Glu Asp 195 200 205 Gly Gln Gly Asp Ser Gly Ile Ser Ser His Phe Gln Pro Trp Pro Lys 215 220 His Ser Leu Lys His Arg Val Lys Lys Ser Pro Pro Glu Glu Ser Asn 230 235 Gln Asn Gly Gly Glu Gly Ser Tyr Arg Glu Ala Glu Thr Phe Asn Ser 245 250 Gln Val Gly Leu Pro Ile Leu Tyr Phe Ser Gly Arg Arg Glu Arg Leu 260 265 Leu Leu Arg Pro Glu Val Leu Ala Glu Ile Pro Arg Glu Ala Phe Thr 275 280 285 Val Glu Ala Trp Val Lys Pro Glu Gly Gly Gln Asn Asn Pro Ala Ile 295 300 Ile Ala Gly Asn Thr Leu Leu Leu Gly Phe Leu Lys Ser *

<210> 1586 <211> 80

<212> PRT <213> Homo sapiens

<210> 1587 <211> 316 <212> PRT <213> Homo sapiens

<400> 1587 Met Phe Phe Gly Ser Ala Ala Leu Gly Thr Leu Thr Gly Leu Ile Ser 10 Ala Leu Val Leu Lys His Ile Asp Leu Arg Lys Thr Pro Ser Leu Glu 20 25 Phe Gly Met Met Ile Ile Phe Ala Tyr Leu Pro Tyr Gly Leu Ala Glu 40 Gly Ile Ser Leu Ser Gly Ile Met Ala Ile Leu Phe Ser Gly Ile Val 55 60 Met Ser His Tyr Thr His His Asn Leu Ser Pro Val Thr Gln Ile Leu 70 75 Met Gln Gln Thr Leu Arg Thr Val Ala Phe Leu Cys Glu Thr Cys Val 85 90 Phe Ala Phe Leu Gly Leu Ser Ile Phe Ser Phe Pro His Lys Phe Glu 100 105 Ile Ser Phe Val Ile Trp Cys Ile Val Leu Val Leu Phe Gly Arg Ala 115 120 125 Val Asn Ile Phe Pro Leu Ser Tyr Leu Leu Asn Phe Phe Arg Asp His 135 140 Lys Ile Thr Pro Lys Met Met Phe Ile Met Trp Phe Ser Gly Leu Arg 150 155 Gly Ala Ile Pro Tyr Ala Leu Ser Leu His Leu Asp Leu Glu Pro Met 165 170 Glu Lys Arg Gln Leu Ile Gly Thr Thr Thr Ile Val Ile Val Leu Phe 180 185 190 Thr Ile Leu Leu Gly Gly Ser Thr Met Pro Leu Ile Arg Leu Met 200 205 Asp Ile Glu Asp Ala Lys Ala His Arg Arg Asn Lys Lys Asp Val Asn 215 220 Leu Ser Lys Thr Glu Lys Met Gly Asn Thr Val Glu Ser Glu His Leu 230 235 Ser Glu Leu Thr Glu Glu Glu Tyr Glu Ala His Tyr Ile Arg Arg Gln 245 250 Asp Leu Lys Gly Phe Val Trp Leu Asp Ala Lys. Tyr Leu Asn Pro Phe 265

<210> 1588
<211> 53
<212> PRT
<213> Homo sapiens
<221> misc_feature
<222> (1) ... (53)
<223> Xaa = any amino acid or nothing

<210> 1589 <211> 437 <212> PRT <213> Homo sapiens

<400> 1589 Met Leu Lys Val Ser Ala Val Leu Cys Val Cys Ala Ala Ala Trp Cys 5 10 Ser Gln Ser Leu Ala Ala Ala Ala Val Ala Ala Ala Gly Gly Arg 25 Ser Asp Gly Gly Asn Phe Leu Asp Asp Lys Gln Trp Leu Thr Thr Ile 35 40 Ser Gln Tyr Asp Lys Glu Val Gly Gln Trp Asn Lys Phe Arg Asp Glu 50 55 60 Val Glu Asp Asp Tyr Phe Arg Thr Trp Ser Pro Gly Lys Pro Phe Asp 70 75 . 80 Gln Ala Leu Asp Pro Ala Lys Asp Pro Cys Leu Lys Met Lys Cys Ser 90 Arg His Lys Val Cys Ile Ala Gln Asp Ser Gln Thr Ala Val Cys Ile 105 Ser His Arg Arg Leu Thr His Arg Met Lys Glu Ala Gly Val Asp His 120 Arg Gln Trp Arg Gly Pro Ile Leu Ser Thr Cys Lys Gln Cys Pro Val 135 140 Val Tyr Pro Ser Pro Val Cys Gly Ser Asp Gly His Thr Tyr Ser Phe 150 155 Gln Cys Lys Leu Glu Tyr Gln Ala Cys Val Leu Gly Lys Gln Ile Ser

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165
                             170
Val Lys Cys Glu Gly His Cys Pro Cys Pro Ser Asp Lys Pro Thr Ser
                185 190
Thr Ser Arg Asn Val Lys Arg Ala Cys Ser Asp Leu Glu Phe Arg Glu
          200
Val Ala Aşn Arg Leu Arg Asp Trp Phe Lys Ala Leu His Glu Ser Gly
                    215
                           220
Ser Gln Asn Lys Lys Thr Lys Thr Leu Leu Arg Pro Glu Arg Ser Arg
              230 235 240
Phe Asp Thr Ser Ile Leu Pro Ile Cys Lys Asp Ser Leu Gly Trp Met
            245
                            250
Phe Asn Arg Leu Asp Thr Asn Tyr Asp Leu Leu Leu Asp Gln Ser Glu
         260
                          265
                                           270
Leu Arg Ser Ile Tyr Leu Asp Lys Asn Glu Gln Cys Thr Lys Ala Phe
              280
                                      285
Phe Asn Ser Cys Asp Thr Tyr Lys Asp Ser Leu Ile Ser Asn Asn Glu
                    295
                             300
Trp Cys Tyr Cys Phe Gln Arg Gln Gln Asp Pro Pro Cys Gln Thr Glu
               310
                                315
Leu Ser Asn Ile Gln Lys Arg Gln Gly Val Lys Lys Leu Leu Gly Gln
            325
                             330 335
Tyr Ile Pro Leu Cys Asp Glu Asp Gly Tyr Tyr Lys Pro Thr Gln Cys
       340
                          345
His Gly Ser Val Gly Gln Cys Trp Cys Val Asp Arg Tyr Gly Asn Glu
     355 360
Val Met Gly Ser Arg Ile Asn Gly Val Ala Asp Cys Ala Ile Asp Phe
                 375
Glu Ile Ser Gly Asp Phe Ala Ser Gly Asp Phe His Glu Trp Thr Asp
               390
                                395
Asp Glu Asp Asp Glu Asp Asp Ile Met Asn Asp Glu Asp Glu Ile Glu
           405
                           410
Asp Asp Asp Glu Asp Glu Gly Asp Asp Asp Gly Gly Asp Asp His
        420
Asp Val Tyr Ile
      435 436
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<210> 1590 <211> 49 <212> PRT <213> Homo sapiens

<210> 1591 <211> 73 <212> PRT

<213> Homo sapiens

<210> 1592 <211> 62 <212> PRT <213> Homo sapiens

tars nome baptem

<400> 1592

Met Tyr Phe Ser Leu Ile Phe Leu Val Phe Phe Phe Leu Ser Leu Pro 15

Leu Ser Ser Ser Ser Ser Ser Glu Pro Thr Ser Ser Ile Leu Gly Phe Ser 20

Ser Ser Ser Leu Ser Ser Ser Ser Ser Ser Ser Phe Ser Pro Phe Ser Ser Ser Ser Ala

Ser Ser Ser Leu Ile Ser Phe Ser Arg Ser Phe Ser Lys *

50 ** **Endown**

<210> 1593 <211> 128 <212> PRT <213> Homo sapiens

<400> 1593

Met Arg Ala Met Leu Gly Thr Cys Ala Leu Gly Gln Phe Phe Leu Ile 10 Met Gly Asn Thr Gln Arg Cys Asp Asp Phe Pro Thr Glu Ser Pro Pro 25 30 Ala Lys Thr Asn Val Ser Arg Ala Gly Leu Ser Pro Pro Cys Glu Ala 40 45 Leu His Gly Val Glu Ser Arg Gly Ser Cys Ser His Gly Lys Leu Gln 55 60 Ser Pro Pro Gly Arg Asp Trp Pro Gln Gly Asp Pro Gln Asp Arg Pro 70 Lys Arg Arg Trp Gln Arg Pro Gly Pro Ala Gly Arg Gly Ala Pro Asp 85 90 Pro Thr Pro Lys Gly Gln Gly Ala Ala Val Pro Pro Arg Ser Ala Ser 105 110 Met Phe Leu Ile His Lys Gln Met Trp Ala Tyr Gly Phe Gly Asp $\,\,$ $\,$ 120

<210> 1594 <211> 46 <212> PRT <213> Homo sapiens

<400> 1594

<210> 1595 <211> 86 <212> PRT <213> Homo sapiens

<400> 1595 Met Trp Glu Glu Leu Leu Arg Gly Leu Thr Ala Pro Tyr Trp Leu Ser 5 10 15 Ser Trp Leu Cys Phe Ser Trp Arg Ala Ala Thr Val Ala Val Ala Val 25 Ala Val Ala Val Ala Ala Ala Ala Thr Ala Ala Ala Ala Ala Ala 35 40 4.5 Cys Val Lys Ser Val Glu Gly Leu Ala Ala Cys Glu Gly Arg Pro Arg 55 60 Pro Pro Gly Pro Pro Ala Tyr Leu Gln Glu Thr Gln Asp Cys His Ala Leu Cys Val Gly Ser 85

<210> 1596 <211> 69 <212> PRT <213> Homo sapiens

<400> 1596 Met Val Leu Ser Trp Leu Thr Leu Ile Glu Ala Leu Ala Asp Val Met 1 5 10 Thr Thr Asp Gly Asn Met Leu Gln Leu Phe Cys Val Glu Arg Thr Asn 20 25 Leu Leu Val Asn Gln Ile Arg Met Thr Leu Tyr Ala Gln Tyr Arg His 35 40 45 Val Arg Pro Phe Arg Thr Ile Met Lys Pro Ile Leu Thr Arg Glu Val 50 55 Gln Thr Lys Asp * 65 68

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<210> 1597
<211> 56
<212> PRT
<213> Homo sapiens
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<210> 1598 <211> 97 <212> PRT <213> Homo sapiens

Ala Leu Arg Arg Arg Leu Leu Ser Gly Thr Leu Pro Ser Phe Pro Arg
65 70 75 80
Arg Lys Asn Pro Leu His Glu His Leu Leu Ala Phe Ile Val Arg Leu
85 90 95 96

<210> 1599 <211> 113 <212> PRT <213> Homo sapiens

80 Asp Pro Tyr His Leu Ser Arg Asp Leu Tyr Tyr Leu Thr Val Glu Ser Ser Glu Lys Glu Ser Cys Arg Thr Pro Lys Val Val Asp Ile Pro Asp

<210> 1600 <211> 103 <212> PRT <213> Homo sapiens

<400> 1600 Met Gly Ala Trp Ala Trp Val Pro Thr Pro Ser Leu Cys Leu Cys His 10 15 Ser Thr Cys Leu Glu Phe Leu Leu Phe Leu Tyr Ile Leu Phe Tyr Cys 20 25 30 Ile Phe Glu Thr Val Ser Leu Ser Pro Arg Leu Glu Arg Ser Gly Ala 40 4.5 Ile Leu Ala Arg Cys Asn Leu Cys Leu Arg Gly Ser Ser Asp Ser Arg 55 . 60 Ala Leu Ala Ser Arg Val Ala Glu Thr Thr Gly Met His His Ala 65 70 75 Trp Leu Ile Phe Ala Phe Leu Val Glu Thr Gly Phe His His Val Gly 85 90 Gln Ala Gly Leu Asn Ser * 100 102

<210> 1601 <211> 84 <212> PRT <213> Homo sapiens

<400> 1601 Met Val Ala Leu Leu Cys Arg Gln Ile Ile Ser Ala Ala Phe Ser Gly 1 . 5 10 Glu Gly Thr Pro Leu Cys Ser Trp Ser Ser Gly Pro Ile Leu Ser Ser 20 25 Val Cys Leu Leu Cys Pro Leu Ala Val Leu Cys Pro Ala Lys Pro Glu 40 Pro Arg Ala Phe Thr Asp Leu Arg Gly Glu Glu Val Cys Ala Asp Trp 55 60 Phe Met Gly Gly His Gly Arg Val Glu Arg Gly Thr Met Ser Pro His 70 Ser Gly Leu * 83

<210> 1602 <211> 91 <212> PRT

<213> Homo sapiens

<400> 1602 Met Lys Thr Leu Pro Val Leu Val Leu Ser Leu Thr Leu Leu Thr Val 1 10 Phe Ser Glu Thr Ser Pro Ile Leu Thr Glu Lys Gln Ala Lys Gln Leu 20 25 30 Leu Arg Ser Arg Arg Gln Asp Arg Pro Ser Lys Pro Gly Phe Pro Asp 40 45 Glu Pro Met Arg Glu Tyr Met His His Leu Leu Ala Leu Glu His Arg 60 Ala Glu Glu Gln Phe Leu Glu His Trp Leu Asn Pro His Cys Lys Pro 70 His Cys Asp Arg Asn Arg Ile His Pro Val * 85

<210> 1603 <211> 69 <212> PRT <213> Homo sapiens

<210> 1604 <211> 83 <212> PRT <213> Homo sapiens

<400> 1604 Met Leu Gln Pro Met Phe Phe Thr Leu Ser Thr His Leu Val Gly Leu 5 10 Ser Gln Ile Ser Tyr Leu Ser Phe Pro Leu Ile Ser Leu His Pro Ala 20 Gln Val Val Lys Arg Gln Ser Ser Leu Pro Arg Leu Met Gln Ser Ser 35 40 Lys Glu Ser Lys Ala Val Leu Val Glu Ile Ile Leu Arg Ala Arg Lys 55 60 Val Val Lys Tyr Ile Ser Lys Gly Phe Leu Arg Ala Val Cys Ala Glu 65 75 Met Ile * 82

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<210> 1605
     <211> 110
     <212> PRT
     <213> Homo sapiens
     <221> misc_feature
     <222> (1)...(110)
     <223> Xaa = any amino acid or nothing
     <400> 1605
Met Ser Thr Ile Ile Phe Gln Trp Pro Phe Met Leu Val Ser Leu His
 1
                                   10
Arg Cys Arg Lys Leu Pro Arg Ala Leu Lys Asp Trp Gln Ala Phe Leu
           20
                                25
                                              30
Asp Leu Lys Lys Ile Ile Asp Asp Phe Ser Glu Cys Cys Pro Leu Leu
       35
                          40
                                            45
Glu Tyr Met Gly Ser Lys Ala Met Met Glu Arg His Xaa Glu Arg Ile
                       55
                                          60
Thr Thr Leu Thr Gly His Ser Leu Asp Val Gly Asn Glu Ser Phe Lys
                70
Leu Arg Asn Ile Met Glu Ala Pro Leu Leu Xaa Tyr Lys Glu Glu Ile
                              90
Glu Val Glu Tyr Asp Val Met Glu Asp Cys Lys Val Ser Trp
                              105
  · <210> 1606
    <211> 72
    <212> PRT
    <213> Homo sapiens
    <400> 1606
Met Thr Ala Gly Thr Val Thr Met Leu Leu Trp His Ala Ser Asn Trp
                                  10
Asp Val Gln Leu Pro Ser Gln Pro Leu Val Glu Leu Thr Pro Val Arg
                        25
Asp Leu Asp Thr Ser Gly Leu Thr Ala Phe Leu Ala Arg Asp Met Asn 35 40 45
Leu Leu Ser Gly Asn Val Asn Thr Met Asn Gly Glu Ser Ile Ile Ala
                   55
                                          60
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<210> 1607 <211> 59 <212> PRT <213> Homo sapiens

Ile Thr Met Lys Met Leu Ala *

70 71

<400> 1607
Met Phe Thr Arg Phe Ile Gly Leu Phe Leu Lys Phe Ile Leu Met Phe
1 5 10 15

<210> 1608 <211> 118 <212> PRT <213> Homo sapiens

<400> 1608 Met Leu Val Thr Asp Thr Glu Ala Phe Trp Gln Pro Gln Pro Trp Phe 10 Val Val Leu Thr Ala Thr Gly Ala Leu Leu Leu Ala Leu Gl γ 20 25 Trp Leu Leu Gly Arg Leu Leu Gln Gly Leu Ala Gln Leu Leu Gln Ala 35 40 45 Pro Ser Lys Pro Ala Gln Ala Leu Leu Leu Asn Ser Ile Gln Gly Thr 55 60 Glu Gly Ser Ile Glu Gly Phe Leu Glu Ala Pro Lys Met Glu Met Ser 70 75 Gln Ala Pro Ser Ser Val Met Ser Leu Gln His Phe Asp Gly Arg Thr 85 90 Gln Asp Ser Arg Thr Gly Arg Asp Tyr Leu Val Asn Thr His Thr Gly 100 105 Ala Arg Arg Trp Leu * 115 117

<210> 1609 <211> 50 <212> PRT <213> Homo sapiens

908

<210> 1610 <211> 50 <212> PRT <213> Homo sapiens

<210> 1611 <211> 56 <212> PRT <213> Homo sapiens

<210> 1612 <211> 75 <212> PRT <213> Homo sapiens

 Met
 Leu
 Thr
 Leu
 Ala
 Leu
 Leu
 Val
 Leu
 Arg
 Ile
 Cys
 Val
 Cys
 Glu
 Ala

 Ala
 Ser
 Thr
 Phe
 Val
 Cys
 Pro
 Cys
 Leu
 Pro
 Trp
 Leu
 Ser
 Leu
 Leu
 Phe

 Jeu
 His
 Leu
 Leu
 Pro
 Arg
 Leu
 Phe
 Gln
 Val
 Gln
 Ile
 Trp
 Phe
 Leu
 Leu

 Phe
 Leu
 Pro
 Phe
 Leu
 Leu
 Pro
 Ser
 Val
 Pro
 Glu
 Phe
 Pro

 Ala
 Pro
 Gly
 Leu
 Leu
 Pro
 Ser
 Val
 Pro
 Glu
 Ile
 Phe
 Pro
 P

<210> 1613 <211> 192 <212> PRT <213> Homo sapiens

70

Arg Lys Ser Asp Pro Lys Arg Phe Gln Asn Ile Phe Thr Thr Ile Phe 25 Thr Leu Phe Thr Leu Leu Thr Leu Asp Asp Trp Ser Leu Ile Tyr Met 35 40 Asp Ser Arg Ala Gln Gly Ala Trp Tyr Ile Ile Pro Ile Leu Ile Ile 55 60 Tyr Ile Ile Ile Gln Tyr Phe Ile Phe Leu Asn Leu Val Ile Thr Val 70 75 Leu Val Asp Ser Phe Gln Thr Ala Leu Phe Lys Gly Leu Glu Lys Ala 85 90 Lys Gln Glu Arg Ala Ala Arg Ile Gln Glu Lys Leu Leu Glu Asp Ser 100 105 110 Leu Thr Glu Leu Arg Ala Ala Glu Pro Lys Glu Val Ala Ser Glu Gly 115 120 Thr Met Leu Lys Arg Leu Ile Glu Lys Lys Phe Gly Thr Met Thr Glu 140 135 Lys Gln Gln Glu Leu Leu Phe His Tyr Leu Gln Leu Val Ala Ser Val 150 155 Glu Gln Glu Gln Lys Phe Arg Ser Gln Ala Ala Val Ile Asp Glu 165 170 Ile Val Asp Thr Thr Phe Glu Ala Gly Glu Glu Asp Phe Arg Asn $\,\,\star\,\,$ 185

<210> 1614 <211> 153 <212> PRT <213> Homo sapiens

<400> 1614 Met Asp Leu Val Gln Phe Phe Val Thr Phe Phe Ser Cys Phe Leu Ser 1 5 10 Leu Leu Leu Val Ala Ala Val Val Trp Lys Ile Lys Gln Thr Cys Trp 20 25 Ala Ser Arg Arg Glu Gln Leu Leu Arg Glu Arg Gln Gln Met Ala 35 40 Ser Arg Pro Phe Ala Ser Val Asp Val Ala Leu Glu Val Gly Ala Glu 55 Gln Thr Glu Phe Leu Arg Gly Pro Leu Glu Gly Ala Pro Lys Pro Ile 70 75 Ala Ile Glu Pro Cys Ala Gly Asn Arg Ala Ala Val Leu Thr Val Phe 85 90 Leu Cys Leu Pro Arg Gly Ser Ser Gly Ala Pro Pro Pro Gly Gln Ser 100 105 Gly Leu Ala Ile Ala Ser Ala Leu Ile Asp Ile Ser Gln Gln Lys Ala 115 120 125 Ser Asp Ser Lys Asp Lys Thr Ser Gly Val Arg Asn Arg Lys His Leu 135 140 Ser Thr Arg Gln Gly Thr Cys Val * 150 152

<210> 1615 <211> 135 <212> PRT <213> Homo sapiens

<400> 1615 Met His Trp Leu Arg Ala Ser Ala Gly Ser Leu Leu Met Val Pro Leu 10 15 Met Thr Asp Leu His Glu Leu Ala Leu Pro Pro Ala Ser Leu Arg Thr 20 25 Val Val Lys Glu Asn Met Cys Val Leu Pro Phe Pro Val Lys Thr Ser 35 40 Gly Arg Ser Leu Thr Gly Ser Ala Trp Ser Arg Phe His Leu Pro Cys 50 55 60 His Leu Arg Pro Gly Asp Arg Leu Pro Cys His Cys Leu Gly Lys Phe 70 75 Arg Lys Arg Val Ala Lys Trp Cys Ile Arg Lys Asn Met Ala Arg Ser . 90 85 Pro His Leu Leu Gly Gly Arg Pro Asn Ser Thr Ser Gly Pro Leu Cys 100 105 Asp Phe Pro Ala Pro Ser Lys Gln Val Thr Pro Leu Leu Trp Val Ser 115 120 Val Ser Leu Pro Ile Lys * 1.30 134

<210> 1616 <211> 60 <212> PRT <213> Homo sapiens

<210> 1617 <211> 49 <212> PRT <213> Homo sapiens

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<210> 1618
<211> 95
<212> PRT
<213> Homo sapiens
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<400> 1618 Met Trp Thr Val Leu Trp His Arg Phe Ser Met Val Leu Arg Leu Pro 10 Glu Glu Ala Ser Ala Gln Glu Gly Glu Leu Ser Leu Ser Ser Pro Pro 20 25 Ser Pro Glu Pro Asp Trp Thr Leu Ile Ser Pro Gln Gly Met Ala Ala 40 45 Leu Leu Ser Leu Ala Met Ala Thr Phe Thr Gln Glu Pro Gln Leu Cys 50 55 Leu Ser Cys Leu Ser Gln His Gly Ser Ile Leu Met Ser Ile Leu Lys 65 70 75 His Leu Leu Cys Pro Ser Phe Leu Asn Gln Leu Arg Gln Ala * 85

<210> 1619 <211> 54 <212> PRT <213> Homo sapiens

<210> 1620 <211> 71 <212> PRT <213> Homo sapiens

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<210> 1621
    <211> 90
    <212> PRT
    <213> Homo sapiens
    <221> misc_feature
    <222> (1)...(90)
    <223> Xaa = any amino acid or nothing
    <400> 1621
Met Asp His Lys Ser Leu Trp Ala Gly Val Glu Val Leu Leu Leu
                                 10
Gln Gly Gly Ser Ala Tyr Lys Leu Val Cys Tyr Phe Thr Asn Trp Ser
          20
                             25
Gln Asp Arg Gln Glu Pro Gly Lys Phe Thr Pro Glu Asn Ile Asp Pro
       35
                         40
                                        4.5
Phe Leu Cys Ser His Leu Ile Tyr Ser Phe Ala Ser Ile Glu Asn Asn
  50
                     55
                              60
Lys Val Ile Ile Arg Thr Pro Xaa Phe Phe Pro Leu Pro Leu Gly His
                 70 -
Arg Leu Gln Thr Ile Asn Pro Arg Leu *
              85
    <210> 1622
    <211> 53
    <212> PRT
    <213> Homo sapiens
    <400> 1622
Met Gln Cys Ala Ile Cys Ile Leu Leu Tyr Leu Leu Asn Lys Lys Thr
                              10
Val Trp Arg Cys Ser Arg Ile His His Asn Asn Thr Val Val Leu Thr
        20 25 30
Arg Glu Ser Ser Pro Phe Leu Thr Thr Cys Thr Leu Ser Ser Val Leu
       35
                   40
Leu Thr Lys Ala *
   50 52
    <210> 1623
    <211> 978
    <212> PRT
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<400> 1623

<213> Homo sapiens

Thr Gly Ser Ile Lys Trp Thr Leu Lys Glu Asp Pro Val Leu Gln Val Pro Thr His Val Glu Glu Pro Ala Phe Leu Pro Asp Pro Asn Asp Gly Ser Leu Tyr Thr Leu Gly Ser Lys Asn Asn Glu Gly Leu Thr Lys Leu Pro Phe Thr Ile Pro Glu Leu Val Gln Ala Ser Pro Cys Arg Ser Ser Asp Gly Ile Leu Tyr Met Gly Lys Lys Gln Asp Ile Trp Tyr Val Ile Asp Leu Leu Thr Gly Glu Lys Gln Gln Thr Leu Ser Ser Ala Phe Ala Asp Ser Leu Cys Pro Ser Thr Ser Leu Leu Tyr Leu Gly Arg Thr Glu Tyr Thr Ile Thr Met Tyr Asp Thr Lys Thr Arg Glu Leu Arg Trp Asn Ala Thr Tyr Phe Asp Tyr Ala Ala Ser Leu Pro Glu Asp Asp Val Asp Tyr Lys Met Ser His Phe Val Ser Asn Gly Asp Gly Leu Val Val Thr Val Asp Ser Glu Ser Gly Asp Val Leu Trp Ile Gln Asn Tyr Ala Ser Pro Val Val Ala Phe Tyr Val Trp Gln Arg Glu Gly Leu Arg Lys Val Met His Ile Asn Val Ala Val Glu Thr Leu Arg Tyr Leu Thr Phe Met Ser Gly Glu Val Gly Arg Ile Thr Lys Trp Lys Tyr Pro Phe Pro Lys 260 . Glu Thr Glu Ala Lys Ser Lys Leu Thr Pro Thr Leu Tyr Val Gly Lys Tyr Ser Thr Ser Leu Tyr Ala Ser Pro Ser Met Val His Glu Gly Val Ala Val Val Pro Arg Gly Ser Thr Leu Pro Leu Leu Glu Gly Pro Gln Thr Asp Gly Val Thr Ile Gly Asp Lys Gly Glu Cys Val Ile Thr Pro Ser Thr Asp Val Lys Phe Asp Pro Gly Leu Lys Ser Lys Asn Lys Leu Asn Tyr Leu Arg Asn Tyr Trp Leu Leu Ile Gly His His Glu Thr Pro Leu Ser Ala Ser Thr Lys Met Leu Glu Arg Phe Pro Asn Asn Leu Pro Lys His Arg Glu Asn Val Ile Pro Ala Asp Ser Glu Lys Lys Ser Phe Glu Glu Val Ile Asn Leu Val Asp Gln Thr Ser Glu Asn Ala Pro Thr Thr Val Ser Arg Asp Val Glu Glu Lys Pro Ala His Ala Pro Ala Arg Pro Glu Ala Pro Val Asp Ser Met Leu Lys Asp Met Ala Thr Ile Ile Leu Ser Thr Phe Leu Leu Ile Gly Trp Val Ala Phe Ile Ile Thr Tyr Pro Leu Ser Met His Gln Gln Gln Leu Gln His Gln Gln Phe Gln Lys Glu Leu Glu Lys Ile Gln Leu Leu Gln Gln Gln Gln Gln Leu Pro Phe His Pro Pro Gly Asp Thr Ala Gln Asp Gly Glu Leu Leu Asp Thr Ser Gly Pro Tyr Ser Glu Ser Ser Gly Thr Ser Ser Pro Ser Thr

		515					520					525			
Ser	Pro 530	Arg	Ala	Ser	Asn	His 535		Leu	Cys	Ser	Gly 540		Ser	Ala	Ser
Lys 545	Ala	Gly	Ser	Ser	Pro 550	Ser	Leu	Glu	Gln	Asp 555		Gly	Asp	Glu	Glu 560
Thr	Ser	Val	Val	Ile 565	Val	Gly	Lys	Ile	Ser 570		Cys	Pro	Lys	Asp 575	
Leu	Gly	His	Gly 580	Ala	Glu	Gly	Thr	Ile 585	Val	Tyr	Arg	Gly	Met 590	Phe	Asp
Asn	Arg	Asp 595	Val	Ala	Val	Lys	Arg 600	Ile	Leu	Pro	Glu	Cys 605	Phe	Ser	Phe
Ala	Asp 610	Arg	Glu	Val	Gln	Leu 615	Leu	Arg	Glu	Ser	Asp 620	Glu	His	Pro	Asn
625					630					635				Tyr	640
				645					650					Gln 655	
			660					665					670	Gln	
		675					680					685		Arg	
	690					695					700			Glγ	
705					710	_		_		715	_	_		Ala	720
				725					730					Glu 735	
			740					745					750	Pro	
		755					760					765		Val	
261		Gry	Ser	пть	PIO	775	СТУ	ьys	Ser	ьeu	780	Arg	GIN	Ala	Asn
Tla	770	Lau	Glac	ת דת	Cara		T 011	7 ~~	Crra	T 0	774	D	G1	T	772
785	Leu				790	Ser				795				Lys	800
785 Glu	Leu Asp	Val	Ile	Ala 805	790 Arg	Ser Glu	Leu	Ile	Glu 810	795 Lys	Met	Ile	Ala	Met 815	800 Asp
785 Glu Pro	Leu Asp Gln	Val Lys	Ile Arg 820	Ala 805 Pro	790 Arg Ser	Ser Glu Ala	Leu Lys	Ile His 825	Glu 810 Val	795 Lys Leu	Met Lys	Ile His	Ala Pro 830	Met 815 Phe	800 Asp Phe
785 Glu Pro Trp	Leu Asp Gln Ser	Val Lys Leu 835	Ile Arg 820 Glu	Ala 805 Pro Lys	790 Arg Ser Gln	Ser Glu Ala Leu	Leu Lys Gln 840	Ile His 825 Phe	Glu 810 Val Phe	795 Lys Leu Gln	Met Lys Asp	Ile His Val 845	Ala Pro 830 Ser	Met 815 Phe Asp	800 Asp Phe Arg
785 Glu Pro Trp Ile	Leu Asp Gln Ser Glu 850	Val Lys Leu 835 Lys	Ile Arg 820 Glu Glu	Ala 805 Pro Lys Ser	790 Arg Ser Gln Leu	Ser Glu Ala Leu Asp 855	Leu Lys Gln 840 Gly	Ile His 825 Phe Pro	Glu 810 Val Phe Ile	795 Lys Leu Gln Val	Met Lys Asp Lys 860	Ile His Val 845 Gln	Ala Pro 830 Ser Leu	Met 815 Phe Asp Glu	800 Asp Phe Arg
785 Glu Pro Trp Ile Gly 865	Leu Asp Gln Ser Glu 850 Gly	Val Lys Leu 835 Lys Arg	Ile Arg 820 Glu Glu Ala	Ala 805 Pro Lys Ser Val	790 Arg Ser Gln Leu Val 870	Ser Glu Ala Leu Asp 855 Lys	Leu Lys Gln 840 Gly Met	Ile His 825 Phe Pro Asp	Glu 810 Val Phe Ile Trp	795 Lys Leu Gln Val Arg 875	Met Lys Asp Lys 860 Glu	Ile His Val 845 Gln Asn	Ala Pro 830 Ser Leu Ile	Met 815 Phe Asp Glu Thr	800 Asp Phe Arg Arg Val 880
785 Glu Pro Trp Ile Gly 865 Pro	Leu Asp Gln Ser Glu 850 Gly Leu	Val Lys Leu 835 Lys Arg Gln	Ile Arg 820 Glu Glu Ala Thr	Ala 805 Pro Lys Ser Val Asp 885	790 Arg Ser Gln Leu Val 870 Leu	Ser Glu Ala Leu Asp 855 Lys	Leu Lys Gln 840 Gly Met	Ile His 825 Phe Pro Asp	Glu 810 Val Phe Ile Trp Arg 890	795 Lys Leu Gln Val Arg 875 Thr	Met Lys Asp Lys 860 Glu Tyr	Ile His Val 845 Gln Asn Lys	Ala Pro 830 Ser Leu Ile Gly	Met 815 Phe Asp Glu Thr Gly 895	800 Asp Phe Arg Arg Val 880 Ser
785 Glu Pro Trp Ile Gly 865 Pro Val	Leu Asp Gln Ser Glu 850 Gly Leu Arg	Val Lys Leu 835 Lys Arg Gln Asp	Ile Arg 820 Glu Glu Ala Thr Leu 900	Ala 805 Pro Lys Ser Val Asp 885 Leu	790 Arg Ser Gln Leu Val 870 Leu Arg	Ser Glu Ala Leu Asp 855 Lys Arg	Leu Lys Gln 840 Gly Met Lys Met	Ile His 825 Phe Pro Asp Phe Arg 905	Glu 810 Val Phe Ile Trp Arg 890 Asn	795 Lys Leu Gln Val Arg 875 Thr	Met Lys Asp Lys 860 Glu Tyr	Ile His Val 845 Gln Asn Lys	Ala Pro 830 Ser Leu Ile Gly His 910	Met 815 Phe Asp Glu Thr Gly 895 Tyr	800 Asp Phe Arg Arg Val 880 Ser Arg
785 Glu Pro Trp Ile Gly 865 Pro Val	Leu Asp Gln Ser Glu 850 Gly Leu Arg	Val Lys Leu 835 Lys Arg Gln Asp	Ile Arg 820 Glu Glu Ala Thr Leu 900 Ala	Ala 805 Pro Lys Ser Val Asp 885 Leu	790 Arg Ser Gln Leu Val 870 Leu Arg	Ser Glu Ala Leu Asp 855 Lys Arg Ala Arg	Leu Lys Gln 840 Gly Met Lys Met Glu 920	His 825 Phe Pro Asp Phe Arg 905 Thr	Glu 810 Val Phe Ile Trp Arg 890 Asn	795 Lys Leu Gln Val Arg 875 Thr Lys	Met Lys Asp Lys 860 Glu Tyr Lys Thr	Ile His Val 845 Gln Asn Lys His	Ala Pro 830 Ser Leu Ile Gly His 910 Pro	Met 815 Phe Asp Glu Thr Gly 895 Tyr	800 Asp Phe Arg Arg Val 880 Ser Arg
785 Glu Pro Trp Ile Gly 865 Pro Val Glu Phe	Leu Asp Gln Ser Glu 850 Gly Leu Arg Leu Val 930	Val Lys Leu 835 Lys Arg Gln Asp Pro 915 Cys	Arg 820 Glu Glu Ala Thr Leu 900 Ala	Ala 805 Pro Lys Ser Val Asp 885 Leu Glu	790 Arg Ser Gln Leu Val 870 Leu Arg Val Thr	Ser Glu Ala Leu Asp 855 Lys Arg Ala Arg	Leu Lys Gln 840 Gly Met Lys Met Glu 920 Arg	Ile His 825 Phe Pro Asp Phe Arg 905 Thr	Glu 810 Val Phe Ile Trp Arg 890 Asn Leu	795 Lys Leu Gln Val Arg 875 Thr Lys Gly	Met Lys Asp Lys 860 Glu Tyr Lys Thr Leu 940	Ile His Val 845 Gln Asn Lys His Leu 925 Leu	Ala Pro 830 Ser Leu Ile Gly His 910 Pro	Met 815 Phe Asp Glu Thr Gly 895 Tyr Asp	800 Asp Phe Arg Val 880 Ser Arg Asp
785 Glu Pro Trp Ile Gly 865 Pro Val Glu Phe Tyr 945	Leu Asp Gln Ser Glu 850 Gly Leu Arg Leu Val 930 Arg	Val Lys Leu 835 Lys Arg Gln Asp Pro 915 Cys Ala	Arg 820 Glu Glu Ala Thr Leu 900 Ala Tyr	Ala 805 Pro Lys Ser Val Asp 885 Leu Glu Phe	790 Arg Ser Gln Leu Val 870 Leu Arg Val Thr	Ser Glu Ala Leu Asp 855 Lys Arg Ala Arg Ser 935 Cys	Leu Lys Gln 840 Gly Met Lys Met Glu 920 Arg	His 825 Phe Pro Asp Phe Arg 905 Thr Phe His	Glu 810 Val Phe Ile Trp Arg 890 Asn Leu Pro	795 Lys Leu Gln Val Arg 875 Thr Lys Gly His Arg 955	Met Lys Asp Lys 860 Glu Tyr Lys Thr Leu 940 Leu	Ile His Val 845 Gln Asn Lys His Leu 925 Leu Phe	Ala Pro 830 Ser Leu Ile Gly His 910 Pro Ala Gln	Met 815 Phe Asp Glu Thr Gly 895 Tyr	800 Asp Phe Arg Arg Val 880 Ser Arg Asp Thr
785 Glu Pro Trp Ile Gly 865 Pro Val Glu Phe Tyr 945	Leu Asp Gln Ser Glu 850 Gly Leu Arg Leu Val 930 Arg	Val Lys Leu 835 Lys Arg Gln Asp Pro 915 Cys Ala	Arg 820 Glu Glu Ala Thr Leu 900 Ala Tyr	Ala 805 Pro Lys Ser Val Asp 885 Leu Glu Phe	790 Arg Ser Gln Leu Val 870 Leu Arg Val Thr	Ser Glu Ala Leu Asp 855 Lys Arg Ala Arg Ser 935 Cys	Leu Lys Gln 840 Gly Met Lys Met Glu 920 Arg	His 825 Phe Pro Asp Phe Arg 905 Thr Phe His	Glu 810 Val Phe Ile Trp Arg 890 Asn Leu Pro	795 Lys Leu Gln Val Arg 875 Thr Lys Gly His Arg 955	Met Lys Asp Lys 860 Glu Tyr Lys Thr Leu 940 Leu	Ile His Val 845 Gln Asn Lys His Leu 925 Leu Phe	Ala Pro 830 Ser Leu Ile Gly His 910 Pro Ala Gln	Met 815 Phe Asp Glu Thr Gly 895 Tyr Asp His	800 Asp Phe Arg Arg Val 880 Ser Arg Asp Thr

ьец 977

<210> 1624 <211> 56 <212> PRT <213> Homo sapiens

<210> 1625 <211> 146 <212> PRT <213> Homo sapiens

<400> 1625 Met Glu Leu Ala Leu Leu Cys Gly Leu Val Val Met Ala Gly Val Ile 1 5 10 Pro Ile Gln Gly Gly Ile Leu Asn Leu Asn Lys Met Val Lys Gln Val 20 25 Thr Gly Lys Met Pro Ile Leu Ser Tyr Trp Pro Tyr Gly Cys His Cys 35 40 Gly Leu Gly Gly Arg Gly Gln Pro Lys Asp Ala Thr Asp Trp Cys Cys 50 55 60 Gln Thr His Asp Cys Cys Tyr Asp His Leu Lys Thr Gln Gly Cys Gly 70 75 Ile Tyr Lys Asp Tyr Tyr Arg Tyr Asn Phe Ser Gln Gly Asn Ile His 8.5 90 Cys Ser Asp Lys Gly Ser Trp Cys Glu Gln Gln Leu Cys Ala Cys Asp 100 105 110 Lys Glu Val Ala Phe Cys Leu Lys Arg Asn Leu Asp Thr Tyr Gln Lys 120 125 Arg Leu Arg Phe Tyr Trp Arg Pro His Cys Arg Gly Gln Thr Pro Gly 130 Cys *

<210> 1626 <211> 385 <212> PRT <213> Homo sapiens

145

 $<\!400\!>$ 1626 . Met Glu Phe Gly Leu Ser Trp Leu Phe Leu Val Ala Ile Leu Lys Gly

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10
Val Gln Cys Glu Val Gln Leu Val Glu Ser Gly Gly Gly Leu Val Gln
          20
                           25
Pro Gly Gly Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Thr Phe
                        40
Ser Ser Tyr Ala Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu
                     55
Glu Trp Val Ser Gly Ile Gly Gly Ser Gly Ser Ser Thr Tyr Tyr Ala
              70
                                  75
Asp Ser Val Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ser Gln Asn
              85
                               90
Thr Leu Tyr Leu Gln Met Asn Ser Leu Arg Ala Glu Asp Thr Ala Val
                         105
Tyr Tyr Cys Ala Lys Ser His Pro Ala Tyr Tyr Tyr Gly Ser Gly Ser
     115
                120
                                        125
Tyr Ser Ser His Tyr Tyr Tyr Tyr Gly Met Asp Val Trp Gly Gln
          135
                                  140
Gly Thr Thr Val Thr Val Ser Ser Gly Asp Gly Ser Ser Gly Gly Ser
        150
                                 155
Gly Gly Ala Ser Thr Gly Glu Ile Val Leu Thr Gln Ser Pro Gly Thr
             165
                               170
Leu Ser Leu Ser Pro Gly Glu Arg Ala Thr Leu Ser Cys Arg Ala Ser
         180
                          185
Gln Ser Val Ser Ser Ser Tyr Leu Ala Trp Tyr Gln Gln Lys Pro Gly
      195
                       200
Gln Ala Pro Arg Leu Leu Ile Tyr Gly Ala Ser Ser Arg Ala Thr Gly
 210 215
                               220
Ile Pro Asp Arg Phe Ser Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu
                         235
225
         230
Thr Ile Ser Arg Leu Glu Pro Glu Asp Phe Ala Val Tyr Tyr Cys Gln
                              250
             245
Gln Tyr Gly Ser Ser Pro Thr Thr Phe Gly Gln Gly Thr Lys Val Glu
         260
                                         270
                265
Ile Lys Arg Thr Val Ala Ala Pro Ser Val Phe Ile Phe Pro Pro Ser
     275
              280
                                      285
Asp Glu Gln Leu Lys Ser Gly Thr Ala Ser Val Val Cys Leu Leu Asn
                             300
          295
Asn Phe Tyr Pro Arg Glu Ala Lys Val Gln Trp Lys Val Asp Asn Ala
                310
                                  315
Leu Gln Ser Gly Asn Ser Gln Glu Ser Val Thr Glu Gln Asp Ser Lys
           325 330 335
Asp Ser Thr Tyr Ser Leu Ser Ser Thr Leu Thr Leu Ser Lys Ala Asp
          340
                        345
                                            350
Tyr Glu Lys His Lys Val Tyr Ala Cys Glu Val Thr His Ser Gly Ala
                      360
    355
                                      365
Leu Ser Phe Ala Arg Ser Gln Arg Ser Phe Gln Pro Gly Glu Ser Val
            375
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<210> 1627 <211> 101 <212> PRT

<213> Homo sapiens

<400> 1627

Met Ile Val His Cys Thr Ile Ile Pro Leu Ser Phe Cys Val His Arg 10 Leu Arg Ala Pro Leu Asp Ala Tyr Phe Gln Val Ser Arg Thr Gln Pro 20 25 Asp Leu Pro Ala Thr Thr Tyr Asp Ser Glu Thr Arg Asn Pro Val Ser 40 Glu Glu Leu Gln Val Ser Ser Ser Ser Asp Ser Asp Ser Asp Ser Ser 55 60 Ala Glu Tyr Gly Gly Val Val Asp Gln Ala Glu Glu Ser Gly Ala Val 70 75 Ile Leu Glu Gly Gln Tyr Phe Thr Gln Val Trp Thr His Lys Ala Asn 85 90 Ile His Glu Ala * 100

<210> 1628 <211> 71 <212> PRT <213> Homo sapiens

<210> 1629 <211> 112 <212> PRT

<213> Homo sapiens

<400> 1629 Met Ala His Tyr Lys Thr Glu Gln Asp Asp Trp Leu Ile Ile Tyr Leu 10 Lys Tyr Leu Leu Phe Val Phe Asn Phe Phe Phe Trp Val Gly Gly Ala 25 20 Ala Val Leu Ala Val Gly Ile Trp Thr Leu Val Glu Lys Ser Gly Tyr 35 40 Leu Ser Val Leu Ala Ser Ser Thr Phe Ala Ala Ser Ala Tyr Ile Leu 55 Ile Phe Ala Gly Val Leu Val Met Val Thr Gly Phe Leu Gly Phe Gly 70 Ala Ile Leu Trp Glu Arg Lys Gly Cys Leu Ser Thr Tyr Phe Cys Leu 90 Leu Leu Val Ile Phe Leu Asp Glu Leu Glu Ala Gly Val Leu Ala His 105

<210> 1630 <211> 47 <212> PRT <213> Homo sapiens

<400> 1630

Met Trp Pro Gln Leu Lys Ser Phe Phe Leu Ile Pro Thr Gln Ile 5 10 His Phe Asn Leu Thr Asn Leu Pro Ser Trp Arg Arg Arg Glu Leu Arg 20 25 Arg Phe Val Trp Val Ser Met Pro Glu Leu Ile Gly Ala Ser * 40

<210> 1631 <211> 79 <212> PRT <213> Homo sapiens

<400> 1631

Met Tyr Met Trp Ser Gly Leu Leu Gly Ser Lys Trp Thr Leu Val Tyr 1 5 Ser His Phe Leu Asn Met Ala Pro Ala Ser Phe Ser His Tyr Gln Ala 20 25 Ser Leu Pro Leu Leu Glu His Asp Thr Leu Ser Ser Ser Arg Val His 35 40 4.5 Ser Tyr Gln Cys Pro Gly Phe Phe Cys Phe Phe Pro Ser Val Leu Glu 55 60 Phe Ser Gln Leu Gln Lys Thr Tyr Ser Leu Cys Leu Pro Phe * 70 75

<210> 1632 <211> 48 <212> PRT <213> Homo sapiens

<400> 1632 Met Phe Met Cys Arg Leu Leu Trp Ala Thr Gly Ala Tyr Gly Phe 10 Leu Gly Asp Asp Val Glu Tyr Thr Ser Val Leu Pro His Gln Lys Gly 20 25 30 Lys Glu Ala Trp Val Phe Ile Cys Gln Leu Pro Phe Ile Ile Gly * 35 40

<210> 1633 <211> 58 <212> PRT

<213> Homo sapiens

<400> 1633

<210> 1634 <211> 55 <212> PRT <213> Homo sapiens

<400> 1634

<210> 1635 <211> 78 <212> PRT <213> Homo sapiens

<400> 1635 Met Ala Val Val Gln Ala Leu Thr Pro Leu Val Ser Ala Ala Ala Thr 5 10 Ala Ser Cys Leu Thr Ser Cys Ser Trp Ser Leu Thr Phe Pro Glu His 20 25 Ser Val Asn Tyr Gln Ser His Pro Ser Glu Thr Gln Pro Tyr Leu Leu 3.5 40 45 Arg Ser Thr Lys Glu Lys His His His Trp Leu Thr Ala Lys Ala Thr 55 60 Cys Pro Ala Ala Gly Ala Glu Gly Leu Pro Ser Arg Gly * 65 70

<210> 1636 <211> 51 <212> PRT <213> Homo sapiens

<210> 1637 <211> 123 <212> PRT <213> Homo sapiens

<400> 1637 Met Gln Gln Met Met Trp Ala Gly Leu Leu Cys Pro Gln Leu Glu Trp 10 Leu Gln Gly Arg Ala Cys Arg Pro Cys Gly Leu Leu Ala Ser Asp Ala 20 25 30 Ala Ala Leu Trp Phe Arg Gly Gly Ile Ser Ala Trp Glu Asp Ser Cys 35 40 Ala Val Ser Asn Ile Arg His Glu Ala Tyr Asn Cys His Leu Ser Val 50 55 Phe Leu Asn Arg Cys Ala Asn Glu Leu Thr Val Gln Phe Leu Ile Ile 70 75 Leu Ala Phe Gln Ile Met Leu Ser Cys Ala Val Ile Ala Pro Ala Val 85 90 Pro Val Phe Gln Arg Leu Thr Leu Lys Arg Ser Gly Arg Thr Ser Leu 100 105 Gly Ser Thr Gly Arg Leu His Phe Cys Lys * 120 122

<210> 1638 <211> 69 <212> PRT <213> Homo sapiens

<400> 1638 Met Lys Arg Leu Arg Phe Val Leu Arg Val Phe Gln Met Thr Ala Phe 10 15 5 Ile Thr Gly Ala His Thr Ile Thr Asn Tyr Ser Asp Arg Leu Tyr 2.5 3.0 Ile Ser Pro Leu Ser His Phe Phe Met Asn Ser Gly Ser Ser Ala Gln 35 40 45 Ser Val Leu Ser His Ser Tyr Val Ser Gln Ile Phe Phe Lys Asn Val 50 55 60 Ser Lys Tyr Phe * 65 68

<210> 1639

<211> 92 <212> PRT <213> Homo sapiens

<210> 1640 <211> 58 <212> PRT <213> Homo sapiens

85

<210> 1641 <211> 459 <212> PRT <213> Homo sapiens

<400> 1641

 Met
 Ser
 Asp
 Leu
 Leu
 Ser
 Val
 Phe
 Leu
 His
 Leu
 Leu
 Leu
 Phe
 Lys

 Leu
 Val
 Arg
 Phe
 Arg
 His
 His
 Arg
 Tyr
 Asp
 Asp
 Leu
 Val
 Val
 Arg
 Phe
 Arg
 His
 His
 Arg
 Tyr
 Arg
 Arg
 Val
 Arg
 Br
 Br</

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100
                          1.05
Arg Ile Val Gln Leu Ile Gln Asp Thr Arg Ile His Ile Leu Pro Ser
                  120
                                         125
Met Asn Pro Asp Gly Tyr Glu Val Ala Ala Ala Gln Gly Pro Asn Lys
                  135
                                    140
Pro Gly Tyr Leu Val Gly Arg Asn Asn Ala Asn Gly Val Asp Leu Asn
       150 155
Arg Asn Phe Pro Asp Leu Asn Thr Tyr Ile Tyr Tyr Asn Glu Lys Tyr
          165 170 175
Gly Gly Pro Asn His His Leu Pro Leu Pro Asp Asn Trp Lys Ser Gln
                           185
                                            190
Val Glu Pro Glu Thr Arg Ala Val Ile Arg Trp Met His Ser Phe Asn
      195
                       200
Phe Val Leu Ser Ala Asn Leu His Gly Gly Ala Val Val Ala Asn Tyr
                                   220
          215
Pro Tyr Asp Lys Ser Phe Glu His Arg Val Arg Gly Val Arg Arg Thr
                               235
         230
Ala Ser Thr Pro Thr Pro Asp Asp Lys Leu Phe Gln Lys Leu Ala Lys
          245 250
Val Tyr Ser Tyr Ala His Gly Trp Met Phe Gln Gly Trp Asn Cys Gly
         260
                                            270
                          265
Asp Tyr Phe Pro Asp Gly Ile Thr Asn Gly Ala Ser Trp Tyr Ser Leu
                        280
                                         285
Ser Lys Gly Met Gln Asp Phe Asn Tyr Leu His Thr Asn Cys Phe Glu
                            300
                    295
Ile Thr Leu Glu Leu Ser Cys Asp Lys Phe Pro Pro Glu Glu Glu Leu
                                 315
Gln Arg Glu Trp Leu Gly Asn Arg Glu Ala Leu Ile Gln Phe Leu Glu
            325
                              330
Gln Val His Gln Gly Ile Lys Gly Met Val Leu Asp Glu Asn Tyr Asn
                           345
          340
Asn Leu Ala Asn Ala Val Ile Ser Val Ser Gly Ile Asn His Asp Val
                                      365
 355
                     360
Thr Ser Gly Asp His Gly Asp Tyr Phe Arg Leu Leu Leu Pro Gly Ile
                          380
 370
                   375
Tyr Thr Val Ser Ala Thr Ala Pro Gly Tyr Asp Pro Glu Thr Val Thr
              390
                               395
Val Thr Val Gly Pro Ala Glu Pro Thr Leu Val Asn Phe His Leu Lys
            405
                              410
Arg Ser Ile Pro Gln Val Ser Pro Val Arg Arg Ala Pro Ser Arg Arg
          420
                         425
                                            430
His Gly Val Arg Ala Lys Val Gln Pro Gln Pro Arg Lys Lys Glu Met
                    440
Glu Met Arg Gln Leu Gln Arg Gly Pro Ala *
                    455
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<210> 1642 <211> 144 <212> PRT <213> Homo sapiens

Leu Val Thr Leu His Met Leu Leu Cys Ser Ile Pro Leu Ser Gly Arg 40 Leu Asp Ser Asp Glu Gln Lys Ile Gln Asn Asp Ile Ile Asp Ile Leu 50 55 Leu Thr Phe Thr Gln Gly Val Asn Glu Lys Leu Thr Ile Ser Glu Glu 70 Thr Leu Ala Asn Asn Thr Trp Ser Leu Met Leu Lys Glu Val Leu Ser 85 90 95 Ser Ile Leu Lys Val Pro Glu Gly Phe Phe Ser Gly Leu Ile Leu Leu 100 105 110 Ser Glu Leu Leu Pro Leu Pro Leu Pro Met Gln Thr Thr Gln Val Ser 115 120 Leu Pro Tyr Asn Met His Leu Ile Asn Asp Cys Ser Asn Thr Phe * 135 140

<210> 1643 <211> 70 <212> PRT <213> Homo sapiens

<210> 1644 <211> 82 <212> PRT <213> Homo sapiens

<400> 1644 Met Gly Met Gly Thr Leu Ile Ile Met Asn Val Trp Val Leu Phe Ile 5 10 Pro Thr Arg Leu Arg Ile Asp Gln Gln Pro Val His Ile Lys Pro Ser 20 25 · Met Arg Val Leu Asp Lys Trp Val Ser Ala Phe Val His Lys Gly Phe 40 Thr Trp Gly Thr Ser Glu Arg Ile Asn Thr Gly Ser Ser Ser Asp Ile 55 60 Thr Leu Gly Ile Leu Asn Lys Cys Gly Trp Ala Val Phe Cys Ala Ala 65 70 Pro * 81

<210> 1645 <211> 256 <212> PRT <213> Homo sapiens

<400> 1645 Met Ala Ala Leu Thr Val Thr Leu Met Val Leu Ser Ser Pro Leu Ala 10 15 Leu Ala Gly Asp Thr Gln Pro Arg Phe Leu Trp Gln Gly Lys Tyr Lys 25 Cys His Phe Phe Asn Gly Thr Glu Arg Val Gln Phe Leu Glu Arg Leu 40 Phe Tyr Asn Gln Glu Glu Phe Val Arg Phe Asp Ser Asp Val Gly Glu 60 55 Tyr Arg Ala Val Thr Glu Leu Gly Arg Pro Val Ala Glu Ser Trp Asn 70 75 Ser Gln Lys Asp Ile Leu Glu Asp Arg Arg Gly Gln Val Asp Thr Val 85 90 Cys Arg His Asn Tyr Gly Val Gly Glu Ser Phe Thr Val Gln Arg Arg 105 Val His Pro Glu Val Thr Val Tyr Pro Ala Lys Thr Gln Pro Leu Gln 120 His His Asn Leu Leu Val Cys Ser Val Ser Gly Phe Tyr Pro Gly Ser 135 140 Ile Glu Val Arg Trp Phe Arg Asn Gly Gln Glu Glu Lys Ala Gly Val 150 155 Val Ser Thr Gly Leu Ile Gln Asn Gly Asp Trp Thr Phe Gln Thr Leu 165 170 Val Met Leu Glu Thr Val Pro Arg Ser Gly Glu Val Tyr Thr Cys Gln 180 185 190 Val Glu His Pro Ser Val Met Ser Pro Leu Thr Val Glu Trp Arg Ala 195 200 205 Arg Ser Glu Ser Ala Gln Ser Lys Met Leu Ser Gly Val Gly Gly Phe 215 220 Val Leu Gly Leu Leu Phe Leu Gly Ala Gly Leu Phe Ile Tyr Phe Arg 230 235 240 Asn Gln Lys Gly His Ser Gly Leu Gln Pro Thr Gly Phe Leu Ser * 245 250

<210> 1646 <211> 263 <212> PRT <213> Homo sapiens

Asp Asp Gly Arg Arg Lys Pro Gly Ile Gly Gly Arg Glu Arg Trp Asn 85 90 His Val Thr Thr Thr Lys Arg Pro Val Thr Thr Arg Ala Pro Ala 100 105 110 Asn Thr Leu Gly Asn Asp Phe Asp Leu Ala Asp Ala Leu Asp Asp Arg 115 120 125 Asn Asp Arg Asp Asp Gly Arg Arg Lys Pro Ile Ala Gly Gly Gly 135 140 Phe Ser Asp Lys Asp Leu Glu Asp Ile Val Gly Gly Glu Tyr Lys 150 155 Pro Asp Lys Gly Lys Gly Asp Gly Arg Tyr Gly Ser Asn Asp Asp Pro 165 170 175 Gly Ser Gly Met Val Ala Glu Pro Gly Thr Ile Ala Gly Val Ala Ser 180 185 Ala Leu Ala Met Ala Leu Ile Gly Ala Val Ser Ser Tyr Ile Ser Tyr 195 200 205 195 200 Gln Gln Lys Lys Phe Cys Phe Ser Ile Gln Gln Gly Leu Asn Ala Asp 215 Tyr Val Lys Gly Glu Asn Leu Glu Ala Val Val Cys Glu Glu Pro Gln 235 240 Val Lys Tyr Ser Thr Leu His Thr Gln Ser Ala Glu Pro Pro Pro 245 250 Pro Glu Pro Ala Arg Ile 260 262

<210> 1647 <211> 74 <212> PRT <213> Homo sapiens

<210> 1648 <211> 58 <212> PRT <213> Homo sapiens

35 40 45 Asn Ala Met Thr Gly Gly Phe Trp Val * 50 55 57

<210> 1649 <211> 90 <212> PRT <213> Homo sapiens

<400> 1649 Met Gly Val Leu Leu Val Ser Met Val Val Leu Phe Ile Phe Ala Ile 10 Leu Cys Ile Phe Ile Arg Asn Arg Ile Leu Glu Ile Val Tyr Ala Ser 20 25 Leu Gly Ala Leu Leu Phe Thr Cys Phe Leu Ala Val Asp Thr Gln Leu 35 40 Leu Leu Gly Asn Lys Gln Leu Ser Leu Ser Pro Glu Glu Tyr Val Phe 55 60 Ala Ala Leu Asn Leu Tyr Thr Asp Ile Ile Asn Ile Phe Leu Tyr Ile 70 Leu Thr Ile Ile Gly Arg Ala Lys Glu * 85

<210> 1650 <211> 113 <212> PRT <213> Homo sapiens

<400> 1650 Met Ala Leu Gly Val Pro Ile Ser Val Tyr Leu Leu Phe Asn Ala Met 10 Thr Ala Leu Thr Glu Glu Ala Ala Val Thr Val Thr Pro Pro Ile Thr 20 25 30 Ala Gln Gln Gly Asn Trp Thr Val Asn Lys Thr Glu Ala Asp Asn Ile 35 40 45 Glu Gly Pro Ile Ala Leu Lys Phe Ser His Leu Cys Leu Glu Asp His 60 55 Asn Ser Tyr Cys Ile Asn Gly Ala Cys Ala Phe His His Glu Leu Glu 70 65 75 Lys Ala Ile Cys Arg Cys Phe Thr Gly Tyr Thr Gly Glu Arg Cys Leu 85 90 Lys Leu Lys Ser Pro Tyr Asn Val Cys Ser Gly Glu Arg Arg Pro Leu

<210> 1651 <211> 50 <212> PRT <213> Homo sapiens

<210> 1652 <211> 121 <212> PRT <213> Homo sapiens

<400> 1652 Met Ser Arg Ala Gly Met Leu Gly Val Val Cys Ala Leu Leu Val Trp 1 10 Ala Tyr Leu Ala Val Gly Lys Leu Val Val Arg Met Thr Phe Thr Glu 20 Leu Cys Thr His His Pro Trp Ser Leu Arg Cys Glu Ser Phe Cys Arg 40 Ser Arg Val Thr Ala Cys Leu Pro Ala Pro Ala Pro Trp Leu Arg Pro 55 60 Phe Leu Cys Pro Met Leu Phe Ser Asp Arg Asn Pro Val Glu Cys His 70 75 Leu Phe Gly Glu Ala Val Ser Asp Pro Val Cys Lys Gly Leu Leu Pro 85 90 His Tyr Phe Trp His Pro Thr Phe Phe Pro Val Lys Ala Asn Cys Leu 100 105 Val Ser Phe Cys Pro Thr Thr Val * 115

<210> 1653 <211> 111 <212> PRT <213> Homo sapiens

<400> 1653 Met Trp Ser Leu Trp Ile Trp Val Asp Gln His Gln Ala Arg Leu Ile 10 Pro Ser Pro Gln Val Leu Leu Leu Leu Leu Arg Glu Thr Pro Ser Thr 20 25 Ala Ala Ala Val Ala Gly Trp Leu Val Val Ala Ser Met Ala Leu Leu 40 Gln Leu His Ala Val Gly Gly Val Ala Leu Thr Ser Ser His Pro Phe Met Trp Ala Thr Gly Glu Glu Leu Arg Lys Pro Pro Trp Gln Gly Ser 70 75 Ala Gly Ser Ala Ser Gly Val Glu Glu Leu Thr Gly Lys His Ser Cys 85 90 Pro Gly Pro Glu Glu Pro Ala Thr Val Gln Lys Ala Pro Ala *

100 105 110

<210> 1654 <211> 150 <212> PRT <213> Homo sapiens

<400> 1654

Met Trp Ile Cys Arg Val Lys Gln Ala Trp Leu Pro Pro Leu Leu Ser 10 Pro Leu Gly Pro Pro Thr Pro Trp Asp Pro Phe Tyr Ala Ala Pro Ser 25 Pro Pro Val Trp Val Gly Ser Gly Tyr Trp Tyr Arg Gly Leu Leu Ser 35 40 45 Pro Pro Asp Gly Gly Gln Gly Ser Phe Pro Pro His Leu Cys Pro Gln 50 60 Cys Pro Val Gln Ala Gln Ala Gln Ile Gly Pro Tyr Phe Arg Glu Leu 70 75 Gly Glu Pro Pro Ser Glu Thr Lys Trp Tyr Leu Asn Ser His Ser His 85 90 His Arg Ala Ala Gly Thr Gln Arg Arg Leu Arg Cys Leu Gln His Leu 100 $$ 105 $$ 110 Leu Gly Gly Gly Pro Gly Ile Gly Ser Glu Ser Pro Asn Glu Gly
115 120 125 125 120 Pro Gly Gln Val Thr His Ala Cys Asn Leu Ser Thr Leu Gly Gly Lys 130 135 Asp Val Arg Ile Thr * 145 149

<210> 1655 <211> 68 <212> PRT <213> Homo sapiens

<400> 1655

 Met
 Ser
 Arg
 Asn
 Leu
 Arg
 Thr
 Ala
 Leu
 Ile
 Phe
 Gly
 Gly
 Phe
 Ile
 Ser

 1
 5
 5
 10
 10
 15
 15

 Leu
 Ile
 Gly
 Ala
 Phe
 Tyr
 Pro
 Ile
 Tyr
 Phe
 Arg
 Pro
 Leu
 Met
 Arg
 Arg
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 Gly
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 Arg
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 Ala
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 Ala
 Gly
 Ile
 Arg
 Arg

<210> 1656 <211> 61 <212> PRT <213> Homo sapiens

<210> 1657 <211> 80 <212> PRT <213> Homo sapiens

<210> 1658 <211> 160 <212> PRT <213> Homo sapiens

<400> 1658 Met Ala Phe Leu Leu Tyr His Leu Val Tyr His Ile Pro Pro Met Ala 5 10 Pro Val Ser Phe Val Phe Glu Thr Lys Ser Arg Ser Ala Ala Gln Ala 20 25 Gly Val Gln Trp His Asp Pro Gly Ser Pro Gln Pro Leu Pro Pro Arg 40 Phe Lys Arg Phe Ser Cys His Gly Leu Asn Ile Lys Phe Ala Phe Phe 55 Ser His Leu Lys Glu Leu His Leu Asp Ser Gly His Cys Phe Ile Phe Ile Arg Leu Val Lys Gly Ala Val Cys Leu Ile His Val Gln Ile Arg 90 Ile Pro Ser Ala Asp Glu Asp Ile Thr Ile Leu Phe Phe Ile Val Ser 105 110 Lys His Phe Leu Glu Ser Val Phe Lys Met Leu Gln Trp Ser Gln Met 120 125 Thr Leu Ala Thr Val Lys Thr Thr Phe Ile Gly Leu Asn Glu Phe Ile 130 135 140 Cys Ser Pro Ser Thr Leu Pro Ser Gly Lys Lys Asn Gly Leu Ile *

145 150 155 159

<210> 1659 <211> 90 <212> PRT <213> Homo sapiens

<400> 1659

Met Trp Arg Leu Pro His Ser Gln Phe Ile His Ile Val Ile Leu Pro Leu Lys Val Phe Leu Phe Leu Phe Cys Phe Leu Arg Trp Ser Phe Ser 20 25 30 Leu Val Ala Gln Ala Gly Val Gln Trp Arg Asp Leu Gly Pro Leu Gln 35 40 45 Pro Pro Pro Pro Arg Leu Lys Arg Phe Phe Cys Leu Ser Leu Pro Ser 60 55 Ser Trp Asp Tyr Arg His Ser Pro Pro His Pro Ala Asn Phe Tyr Thr 70 Phe Gly Arg Asp Gly Val Ser Pro Cys * 85 89

<210> 1660 <211> 56 <212> PRT <213> Homo sapiens

50 55

<210> 1661 <211> 74 <212> PRT <213> Homo sapiens

Asp Gly Thr Glu Gly His Tyr Pro Lys * 65 70 73

<210> 1662 <211> 271 <212> PRT <213> Homo sapiens

<400> 1662 Met Gly Leu Gly Gln Pro Gln Ala Trp Leu Leu Gly Leu Pro Thr Ala 10 Val Val Tyr Gly Ser Leu Ala Leu Phe Thr Thr Ile Leu His Asn Val 20 Phe Leu Leu Tyr Tyr Val Asp Thr Phe Val Ser Val Tyr Lys Ile Asn 40 45 Lys Met Ala Phe Trp Val Gly Glu Thr Val Phe Leu Leu Trp Asn Ser 55 60 Leu Asn Asp Pro Leu Phe Gly Trp Leu Ser Asp Arg Gln Phe Leu Ser 70 75 Ser Gln Pro Arg Ser Gly Ala Gly Leu Ser Ser Arg Ala Val Val Leu 90 Ala Arg Val Gln Ala Leu Gly Trp His Gly Pro Leu Leu Ala Leu Ser 105 110 Phe Leu Ala Phe Trp Val Pro Trp Ala Pro Ala Gly Leu Gln Phe Leu 120 125 Leu Cys Leu Cys Leu Tyr Asp Gly Phe Leu Thr Leu Val Asp Leu His 135 140 His His Ala Leu Leu Ala Asp Leu Ala Leu Ser Ala His Asp Arg Thr 150 155 His Leu Asn Phe Tyr Cys Ser Leu Phe Ser Ala Ala Gly Ser Leu Ser 170 165 Val Phe Ala Ser Tyr Ala Phe Trp Asn Lys Glu Asp Phe Ser Ser Phe 180 190 Arg Ala Phe Cys Val Thr Leu Ala Val Ser Ser Gly Leu Gly Phe Leu 200 Gly Ala Thr Gln Leu Leu Arg Arg Arg Val Glu Ala Ala Arg Lys Asp 215 220 Pro Gly Cys Ser Gly Leu Val Val Asp Ser Gly Leu Cys Gly Glu Glu 230 235 Leu Leu Val Gly Ser Glu Glu Ala Asp Ser Ile Thr Leu Gly Arg Tyr 245 250 255 Leu Arg Gln Leu Ala Arg His Arg Asn Phe Leu Cys Phe Ser * 260 265

<210> 1663 <211> 53 <212> PRT <213> Homo sapiens

25 30

Lys Tyr Asn Thr Ser Ser Glu Tyr Leu Ser Glu Leu Asp Thr Glu Ala
35 40 45

Ser Arg Val Ser *
50 52

<210> 1664 <211> 271 <212> PRT <213> Homo sapiens

<400> 1664 Met Gly Leu Gly Gln Pro Gln Ala Trp Leu Leu Gly Leu Pro Thr Ala 5 1.0 Val Val Tyr Gly Ser Leu Ala Leu Phe Thr Thr Ile Leu His Asn Val 2.0 25 Phe Leu Leu Tyr Tyr Val Asp Thr Phe Val Ser Val Tyr Lys Ile Asn 35 40 Lys Met Ala Phe Trp Val Gly Glu Thr Val Phe Leu Leu Trp Asn Ser Leu Asn Asp Pro Leu Phe Gly Trp Leu Ser Asp Arg Gln Phe Leu Ser 70 Ser Gln Pro Arg Ser Gly Ala Gly Leu Ser Ser Arg Ala Val Val Leu 85 90 Ala Arg Val Gln Ala Leu Gly Trp His Gly Pro Leu Leu Ala Leu Ser 100 . 105 110 Phe Leu Ala Phe Trp Val Pro Trp Ala Pro Ala Gly Leu Gln Phe Leu 120 115 125 Leu Cys Leu Cys Leu Tyr Asp Gly Phe Leu Thr Leu Val Asp Leu His 130 135 140 His His Ala Leu Leu Ala Asp Leu Ala Leu Ser Ala His Asp Arg Thr 145 150 155 His Leu Asn Phe Tyr Cys Ser Leu Phe Ser Ala Ala Gly Ser Leu Ser 165 170 175 Val Phe Ala Ser Tyr Ala Phe Trp Asn Lys Glu Asp Phe Ser Ser Phe 180 185 Arg Ala Phe Cys Val Thr Leu Ala Val Ser Ser Gly Leu Gly Phe Leu · 195 200 Gly Ala Thr Gln Leu Leu Arg Arg Arg Val Glu Ala Ala Arg Lys Asp 215 220 Pro Gly Cys Ser Gly Leu Val Val Asp Ser Gly Leu Cys Gly Glu Glu 230 235 Leu Leu Val Gly Ser Glu Glu Ala Asp Ser Ile Thr Leu Gly Arg Tyr 245 250 255

Leu Arg Gln Leu Ala Arg His Arg Asn Phe Leu Cys Phe Ser *

265

<210> 1665 <211> 284 <212> PRT <213> Homo sapiens

<400> 1665

Met Asp Glu Lys Ser Asn Lys Leu Leu Leu Ala Leu Val Met Leu Phe 10 Leu Phe Ala Val Ile Val Leu Gln Tyr Val Cys Pro Gly Thr Glu Cys 20 Gln Leu Leu Arg Leu Gln Ala Phe Ser Ser Pro Val Pro Asp Pro Tyr 40 45 Arg Ser Glu Asp Glu Ser Ser Ala Arg Phe Val Pro Arg Tyr Asn Phe 55 60 Thr Arg Gly Asp Leu Leu Arg Lys Val Asp Phe Asp Ile Lys Gly Asp 70 75 Asp Leu Ile Val Phe Leu His Ile Gln Lys Thr Gly Gly Thr Thr Phe 85 90 Gly Arg His Leu Val Arg Asn Ile Gln Leu Glu Gln Pro Cys Glu Cys 100 105 Arg Val Gly Gln Lys Lys Cys Thr Cys His Arg Pro Gly Lys Arg Glu 125 120 Thr Trp Leu Phe Ser Arg Phe Ser Thr Gly Trp Ser Cys Gly Leu His 135 140 Ala Asp Trp Thr Glu Leu Thr Ser Cys Val Pro Ser Val Gly Asp Gly 150 155 Lys Arg Asp Ala Arg Leu Arg Pro Ser Arg Trp Arg Ile Phe His Ile 165 . 170 Leu Tyr Ala Ala Cys Thr Asp Ile Arg Gly Ser Pro Asn Thr Asn Ala 180 185 Gly Ala Asn Ser Pro Ser Phe Thr Lys Thr Arg Asn Thr Ser Lys Ser 195 200 Trp Lys Asn Phe His Tyr Ile Thr Ile Leu Gln Asp Pro Gly Ala Arg 215 220 Ser Leu Ser Glu Trp Arg Pro Val Leu Lys Arg Gly Thr Leu Glu Gly 230 235 Leu Leu Ala Cys Trp Pro Trp Lys Ala Pro Pro Pro Leu Lys Lys Leu 245 250 255 Ser Thr Trp Tyr Pro Gly Glu Glu Leu Val Trp Leu Ala Pro Leu Gln 260 265 Lys Ile Ile Gly Leu Ala Leu Leu Ile Tyr Pro * 280

<210> 1666 <211> 67 <212> PRT <213> Homo sapiens

<210> 1667 <211> 79 <212> PRT <213> Homo sapiens

Thr Gly Leu Arg His Ala Leu Tyr Gln Ser Ile Ser Cys Trp * 65 70 75 78

<210> 1668 <211> 54 <212> PRT <213> Homo sapiens

<210> 1669 <211> 119 <212> PRT <213> Homo sapiens

<400> 1669 Met Met Ala Gly Ile Arg Ala Leu Phe Met Tyr Leu Trp Leu Gln Leu 5 10 Asp Trp Val Ser Arg Gly Glu Ser Val Gly Leu His Leu Pro Thr Leu 20 25 Ser Val Gln Glu Gly Asp Asn Ser Ile Ile Asn Cys Ala Tyr Ser Asn 45 Ser Ala Ser Asp Tyr Phe Ile Trp Tyr Lys Gln Glu Ser Gly Lys Gly 55 60 Pro Gln Phe Ile Ile Asp Ile Arg Ser Asn Met Asp Lys Arg Gln Gly 75 70 Gln Arg Val Thr Val Leu Leu Asn Lys Thr Val Lys His Leu Ser Leu 85 90 Gln Ile Ala Ala Thr Gln Pro Gly Asp Ser Ala Val Tyr Phe Cys Ala 105

Glu Ile Pro Glu Gln Arg * 115 118

<210> 1670 <211> 116 <212> PRT <213> Homo sapiens

<400> 1670 Met Cys Leu Leu Cys Cys Glu Cys Leu Phe His Leu Trp Lys Arg Ile 10 Asn Trp Trp Gln Gly Phe Cys Ser Phe Tyr Leu Leu Leu Trp Val Gly 20 25 Leu Leu Ser Phe Pro Pro Asp Pro Pro Trp Lys Ser Phe Thr Pro Ala 35 40 Ile Leu Phe Leu Ala Trp Gly Thr Gly Ser Ser Pro Gly Arg His Arg 55 60 Phe Ser Leu Pro Thr Asp Arg Arg Pro Ser Ala His Ser Pro Phe Leu 70 75 Ser Thr Leu Gln His Ser Ile Arg Thr Leu Phe His Ser Pro Ile Arg 90 85 95 Ser Ser Arg Phe Ala Phe Val Ser Ser Leu His Ser Tyr Thr Ser Ile 100 105 Pro Ser Leu Pro 115 116

<210> 1671 <211> 70

<212> PRT

<213> Homo sapiens

<400> 1671 Met Ser His Cys Gly Leu Leu Phe Leu Val Val Thr Trp Leu Leu Ser 10 Phe Ile Phe Leu Val Cys Lys Met Arg Ile Thr Phe Leu Phe Cys Leu 20 25 30 Leu Thr Val Asp Met Lys Pro Asn Lys Val Leu Tyr Met Lys Cys Phe 35 40 45 Lys Cys Ile Ile Leu Leu Ser Cys Tyr Pro Leu Lys Phe Leu Val Ile 50 55 Arg Asn Phe Glu Ile 65

<210> 1672 <211> 263 <212> PRT <213> Homo sapiens

<400> 1672
Met Arg Val Leu Cys Ala Phe Pro Glu Ala Met Pro Ser Ser Asn Ser

Arg Pro Pro Ala Cys Leu Ala Pro Gly Ala Leu Tyr Leu Ala Leu Leu 20 25 Leu His Leu Ser Leu Ser Ser Gln Ala Gly Asp Arg Arg Pro Leu Pro 40 Val Asp Arg Ala Ala Gly Leu Lys Glu Lys Thr Leu Ile Leu Leu Asp 55 Val Ser Thr Lys Asn Pro Val Arg Thr Val Asn Glu Asn Phe Leu Ser 70 Leu Gln Leu Asp Pro Ser Ile Ile His Asp Gly Trp Leu Asp Phe Leu 85 Ser Ser Lys Arg Leu Val Thr Leu Ala Arg Gly Leu Ser Pro Ala Phe 100 105 110 Leu Arg Phe Gly Gly Lys Arg Thr Asp Phe Leu Gln Phe Gln Asn Leu 120 125 Arg Asn Pro Ala Lys Ser Arg Gly Gly Pro Gly Pro Asp Tyr Tyr Leu 135 140 Lys Asn Tyr Glu Asp Asp Ile Val Arg Ser Asp Val Ala Leu Asp Lys 150 155 Gln Lys Gly Cys Lys Ile Ala Gln His Pro Asp Gly Met Leu Glu Pro 165 170 Pro Arg Glu Lys Ala Ala Gln Met His Leu Val Leu Leu Lys Glu Gln 185 190 Phe Ser Asn Thr Tyr Ser Asn Leu Ile Leu Thr Glu Pro Asn Asn Tyr 200 Arg Thr Met His Gly Arg Ala Val Asn Gly Ser Gln Leu Gly Lys Asp 215 220 Tyr Ile Gln Leu Lys Ser Leu Leu Gln Pro Ile Arg Ile Tyr Ser Arg 225 230 235 Ala Ser Leu Tyr Gly Pro Asn Ile Val Arg Pro Arg Lys Asn Val Ile 245 250 Ala Leu Leu Asp Gly Leu * 260 262

<210> 1673 <211> 156 <212> PRT <213> Homo sapiens

<400> 1673 Met Lys Trp Lys Thr Gly Val Ala Ile Phe Val Val Val Val Tyr 10 Leu Val Thr Gly Gly Leu Val Phe Arg Ala Leu Glu Gln Pro Phe Glu 25 Ser Ser Gln Lys Asn Thr Ile Ala Leu Glu Lys Ala Glu Phe Leu Arg Asp His Val Cys Val Ser Pro Gln Glu Leu Glu Thr Leu Ile Gln His 60 Ala Leu Asp Ala Asp Asn Ala Gly Val Ser Pro Ile Gly Asn Ser Ser 70 75 Asn Asn Ser Ser His Trp Asp Leu Gly Ser Ala Phe Phe Phe Ala Gly 85 90 95 Thr Val Ile Thr Thr Ile Gly Tyr Gly Asn Ile Ala Pro Ser Thr Glu 110 100 105 Gly Gly Lys Ile Phe Cys Ile Leu Tyr Ala Ile Phe Gly Phe Pro Leu

Phe Gly Phe Leu Leu Ala Gly Ile Glu Asp Gln Leu Gly Thr Ile Phe 130 - 135 - 140 Gly Lys Ser Ile Ala Arg Val Glu Lys Val Phe * 145 - 150 - 150

<210> 1674 <211> 83 <212> PRT <213> Homo sapiens

<400> 1674 Met Cys Cys Val Ile Cys Ser Lys Gln Tyr Val Leu Leu Ser Ile Leu 1 5 10 15 Leu Cys Leu Leu Ala Ser Gly Ser Val Asp Phe Phe Leu Leu Pro His 25 30 Ser Val Leu Ala Asp Asp Asp Gly Ile Lys Val Val Lys Val Thr Phe 35 40 Asn Lys Gln Asp Ser Leu Val Ile Leu Thr Ile Met Val Ser Leu Thr 55 60 Val Ser Phe Pro Gly Leu Cys Thr Cys Gln Ala Gly Thr Gln Asp Thr 65 70 Tyr Thr 82

<210> 1675 <211> 54 <212> PRT <213> Homo sapiens

<210> 1676 <211> 119 <212> PRT <213> Homo sapiens

<210> 1677 <211> 49 <212> PRT <213> Homo sapiens

<210> 1678 <211> 127 <212> PRT <213> Homo sapiens

<400> 1678 Met Gln Thr Lys Gly Gly Gln Thr Trp Ala Arg Arg Ala Leu Leu Leu 1 5 10 15 Gly Ile Leu Trp Ala Thr Ala His Leu Pro Leu Ser Gly Thr Ser Leu 20 30 Pro Gln Arg Leu Pro Arg Ala Thr Gly Asn Ser Thr Gln Cys Val Ile 35 40 45 Ser Pro Ser Ser Glu Phe Pro Glu Gly Phe Phe Thr Arg Gln Glu Arg 55 60 Arg Asp Gly Gly Ile Ile Ile Tyr Phe Leu Ile Ile Val Tyr Met Phe 70 75 Met Ala Ile Ser Ile Val Cys Asp Glu Tyr Phe Leu Pro Ser Leu Glu 85 90 Ile Ile Ser Glu Tyr Ile Gly Asn Lys Lys Glu Met Gln Val Leu Ile 100 1.05 Pro Gly Arg Ile Val Ser Lys Leu Lys Lys Leu Gly Phe Lys 120

<210> 1679

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<211> 49
<212> PRT
<213> Homo sapiens
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<210> 1680 <211> 58 <212> PRT <213> Homo sapiens

<210> 1681 <211> 49 <212> PRT <213> Homo sapiens

Ser Phe Pro Leu Thr Phe Tyr Phe Lys Asn Leu Gln Thr Gln Lys Ser

<210> 1682 <211> 78 <212> PRT <213> Homo sapiens

<210> 1683 <211> 52 <212> PRT <213> Homo sapiens

<400> 1683

<210> 1684 <211> 165 <212> PRT <213> Homo sapiens

<400> 1684

Met Pro Ala Pro Pro Leu Pro Gly Gly Trp Asn Thr Trp Gly Pro Ser 5 10 Leu Ser Leu Pro Leu Leu Leu Gly Ala Val Ala Met Ala Leu Gly 20 Val Arg Pro Pro Gly Gln Val Gly Leu Ser Pro Ile Ala Thr Ala Ser 45 Thr Val Gly Val Pro Arg Cys Leu Gln Thr Ala Phe Arg Gly Asp Ala 55 Gly Trp His Ser Cys Ala Gln Gln Gly Ala Cys Val Ala Leu His Pro 70 75 Ser Glu Arg Arg Leu Gly Ile Ser Asp Glu Ala His Ser Arg Ser Arg 85 90 95 Trp Gly Glu Asp Ser Pro Ser Pro Leu Thr Gly Pro Pro Leu Ser 100 105 110 Pro Ser Pro Pro Asp Cys Leu Ser Leu Pro Arg Leu Thr Pro Leu Arg 115 120 125 Leu Pro Pro Pro Phe Pro Phe Leu Gly Pro Ile Pro Ser Leu Pro 130 135 140 Pro Pro Pro Ser Pro Pro Pro Gln Pro Pro Ala Thr Ala Pro Pro 150 155

Ser Leu Arg Phe * 164

<210> 1685 <211> 153 <212> PRT <213> Homo sapiens

<400> 1685 Met Gly Thr Ala Ala Leu Gly Pro Val Trp Ala Ala Leu Leu Leu Phe 10 Leu Leu Met Cys Glu Ile Pro Met Val Glu Leu Thr Phe Asp Arg Ala 20 25 Val Ala Ser Gly Cys Gln Arg Cys Cys Asp Ser Glu Asp Pro Leu Asp 40 Pro Ala His Val Ser Ser Ala Ser Ser Ser Gly Arg Pro His Ala Leu 55 Pro Glu Ile Arg Pro Tyr Ile Asn Ile Thr Ile Leu Lys Ala Gln Arg 70 Ala Gln His His Ala Glu Pro Glu Cys Asp Ala Gly Pro Gly Leu Arg Gly Pro Arg Leu Gly Ala Ala Leu Gln Ala Pro Ala Arg Glu Arg His Leu Gln Gln Arg Leu Arg His Leu His His Leu Gln Arg Pro Pro His 115 120 125 Gln Gly Arg Gly Arg Leu Arg Ala Ser Gly Pro Pro Ser Arg Leu Glu 135 Ser Ser Ala Asp Pro Ala Pro Ala * 150 152

<210> 1686 <211> 141 <212> PRT <213> Homo sapiens

<400> 1686 Met Arg Arg Thr Ala Phe Ile Leu Gly Ser Gly Leu Leu Ser Phe Val 1 5 10 Ala Phe Trp Asn Ser Val Thr Trp His Leu Gln Arg Phe Trp Gly Ala 25 Ser Gly Tyr Phe Trp Gln Ala Gln Trp Glu Arg Leu Leu Thr Thr Phe 40 Glu Gly Lys Glu Trp Ile Leu Phe Phe Ile Gly Ala Ile Gln Val Pro 55 Cys Leu Phe Phe Trp Ser Phe Asn Gly Leu Leu Leu Val Val Asp Thr 70 Thr Gly Lys Pro Asn Phe Ile Ser Arg Tyr Arg Ile Gln Val Gly Lys 85 90 95 Asn Glu Pro Val Asp Pro Val Lys Leu Arg Gln Ser Ile Arg Thr Val 105 110 Leu Phe Asn Gln Cys Met Ile Ser Phe Pro Met Gly Gly Leu Pro Leu 120 125 Ser Leu Pro Gln Met Val Glu Arg Pro Leu Thr Pro *

130 135 140

<210> 1687 <211> 61 <212> PRT <213> Homo sapiens

<400> 1687

<210> 1688 <211> 68 <212> PRT <213> Homo sapiens

<210> 1689 <211> 74 <212> PRT <213> <u>H</u>omo sapiens

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<210> 1690
<211> 114
<212> PRT
<213> Homo sapiens
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<400> 1690 Met His Met Cys Ala Phe Leu His Val Trp Thr Cys Ala Cys Met His 10 Leu Cys Val Cys Val Cys Ala Glu Thr Gly Lys Gly Val Lys Val Leu 20 25 Val Arg Glu Pro Gly Ser Phe Leu Phe Pro Asn Leu Ser Cys Ser Lys 35 40 45 Glu Gly Trp Gly Trp Gly Gln Pro Leu Leu Lys Val Ile Gly Glu Glu 55 60 Arg Phe Ser Asp Ser Glu Val Thr Ala Ser Val Ala Gln Ala Val Ser 75 Leu Val Thr Val Ile Leu Gln Phe Ser Asp Pro His Val Ser Phe Arg 85 90 Gly Lys Arg Lys Lys Gly Thr Leu Trp Trp Val Leu Gly Gly Lys Arg 105 Lys * 113

<210> 1691 <211> 69 <212> PRT <213> Homo sapiens

 Met
 Ala
 Phe
 Leu
 Leu
 Ser
 Thr
 Leu
 Leu
 Asn
 His
 Tyr
 Leu
 Ala
 Cys
 Lys

 His
 Ser
 Glu
 Leu
 Trp
 Leu
 Gln
 Ser
 Leu
 Asn
 Asn
 Leu
 Gly
 Lys

 His
 Ser
 Glu
 Leu
 Trp
 Leu
 Gln
 Ser
 Leu
 Asn
 Asn
 Leu
 Gly
 Lys
 Lys
 Leu
 Asn
 Ite
 Trp
 Phe
 Val
 Leu
 Gly
 Gln
 Ser
 Trp
 Trp
 Trp

 For
 Ser
 S

<210> 1692 <211> 103 <212> PRT <213> Homo sapiens

 $<\!400\!>$ 1692 Met Leu Gly Pro Thr Val Phe Asn Ile Lys Phe Val Phe Leu Ile Thr l 5 10 15 Ala Leu Gly Ala Leu Pro Ser Ser Leu Pro His Ala His Ser Ala Ala

Trp Thr Leu Leu Pro Gly Pro Roll Gly Val Gly Leu Cys Pro Gly Roll Gly Val Gly Leu Cys Pro Gly Pro Gly Roll Gly Cys Pro Gly Roll Gly Cys Pro Gly Pro Gly Roll Gly Cys Pro Gly Pro Gly Pro Gly Fro Gly Roll Gly Cys Pro Gly Pro Gly Roll Gly Ro

<210> 1693 <211> 48 <212> PRT <213> Homo sapiens

<210> 1694 <211> 92 <212> PRT <213> Homo sapiens

<210> 1695 <211> 83 <212> PRT <213> Homo sapiens

<400> 1695 Met Ala Val Gln Gln Phe Ile Ile Val Val Leu Arg Leu Val Phe 10 . 15 Pro Val Ala Gly Thr Thr Arg Ala Pro Leu His Trp Val Gly Ala Ile 25 30 Pro Gly Trp Glu Trp Pro Pro Gly Asp Asp Ala Tyr Pro Ser Leu Leu 40 45 Ala Pro Ser Gln His Pro Tyr Ser Gly Glu Ala Leu Cys Leu Leu 55 60 Leu Pro Ser Ile Val Leu Leu Glu Ser Cys Arg Lys Val Met Glu Arg 6.5 70 Gly Leu * 82

<210> 1696 <211> 159 <212> PRT <213> Homo sapiens

<400> 1696

Met Leu Trp Leu Phe Gln Ser Leu Leu Phe Val Phe Cys Phe Gly Pro 10 Gly Asn Val Val Ser Gln Ser Ser Leu Thr Pro Leu Met Val Asn Gly 25 Ile Leu Gly Glu Ser Val Thr Leu Pro Leu Glu Phe Pro Ala Gly Glu 4.0 Lys Val Asn Phe Ile Thr Trp Leu Phe Asn Glu Thr Ser Leu Ala Phe 55 Ile Val Pro His Glu Thr Lys Ser Pro Glu Ile His Val Thr Asn Pro 70 Lys Gln Gly Lys Arg Leu Asn Phe Thr Gln Ser Tyr Ser Leu Gln Leu 85 Ser Asn Leu Lys Met Glu Asp Thr Gly Ser Tyr Arg Ala Gln Ile Ser 100 105 110 Thr Lys Thr Ser Ala Lys Leu Ser Ser Tyr Thr Leu Arg Ile Leu Thr 120 125 Leu Tyr Pro Ile Val Gly Asn Gly Ile Trp Gly Asn Lys Asn Phe Leu 135 140 Thr Thr Leu Ala Arg Gly Asn Val Lys Leu Asp Gly Leu His Glu 150 155

<210> 1697 <211> 105 <212> PRT <213> Homo sapiens

<210> 1698 <211> 195 <212> PRT <213> Homo sapiens

<400> 1698 Met Pro Ser Trp Ile Gly Ala Val Ile Leu Pro Leu Leu Gly Leu Leu 10 Leu Ser Leu Pro Ala Gly Ala Asp Val Lys Ala Arg Ser Cys Gly Glu 20 25 Val Arg Gln Ala Tyr Gly Ala Lys Gly Phe Ser Leu Ala Asp Ile Pro 35 40 45 Tyr Gln Glu Ile Ala Gly Glu His Leu Arg Ile Cys Pro Gln Glu Tyr 50 55 60 Thr Cys Cys Thr Thr Glu Met Glu Asp Lys Leu Ser Gln Gln Ser Lys 70 75 Leu Glu Phe Glu Asn Leu Val Glu Glu Thr Ser His Phe Val Arg Thr 85 90 Thr Phe Val Ser Arg His Lys Lys Phe Asp Glu Phe Phe Arg Glu Leu 100 105 110 Leu Glu Asn Ala Glu Lys Ser Leu Asn Asp Met Phe Val Arg Thr Tyr 115 120 125 Gly Met Leu Tyr Met Gln Asn Ser Glu Val Phe Gln Asp Leu Phe Thr 130 135 140 Glu Leu Lys Arg Tyr Tyr Thr Gly Gly Asn Val Asn Leu Glu Glu Met 145 150 155 160 Leu Asn Asp Phe Trp Ala Arg Leu Leu Glu Arg Met Phe Gln Leu Ile 170 175 165 Asn Pro Gln Tyr Pro Phe Ser Glu Gly Phe Leu Gly Met Cys Glu Gln 185 Ile Pro *

<210> 1699 <211> 97 <212> PRT <213> Homo sapiens

194

<210> 1700 <211> 129 <212> PRT <213> Ḥomo sapiens

<400> 1700 Met Gly Trp Ala Pro Leu Leu Leu Thr Leu Leu Ala His Cys Thr Gly 5 10 Ser Trp Ala Gln Ser Val Leu Thr Gln Pro Pro Ser Glu Ser Glu Ala 20 25 Pro Gly Gln Trp Val Asn Ile Ser Cys Thr Gly Ser Gly Ser Asn Leu 35 40 Gly Ala Gly Phe Asp Val Gln Trp Tyr Gln Leu Ile Pro Gly Thr Ala 55 60 Pro Lys Leu Leu Ile Phe Asn Asn Asn Arg Gln Pro Ser Gly Val Pro 75 Asp Arg Phe Ser Ala Ser Lys Ser Gly Thr Ser Ala Ser Leu Thr Ile 90 Asn Asp Leu Gln Pro Glu Asp Glu Ser Glu Tyr Tyr Cys Leu Ala Met 100 105 110 Thr Ala Ala Ser Leu Val Ser Ser Glu Leu Gly Pro Lys Ser Pro Ala 120 125 128

<210> 1701 <211> 219 <212> PRT <213> Homo sapiens

85 90 Arg Trp Asn Glu Ile Phe Gly Asn Asn Leu Gly Ala Leu Ala Met Phe 100 105 110 Cys Val Leu Tyr Pro Glu Asn Ile Glu Ala Arg Asp Met Ala Lys Asp 120 125 Tyr Met Glu Arg Met Ala Ala Gln Pro Ser Trp Leu Val Lys Asp Ala 135 140 Pro Trp Asp Glu Val Pro Leu Ala His Ser Leu Val Gly Phe Ala Thr 150 155 Ala Tyr Asp Phe Leu Tyr Asn His Leu Ser Lys Thr Gln Gln Glu Lys 165 170 Phe Leu Glu Val Ile Ala Asn Ala Ser Gly Tyr Met Phe Val Thr Leu 180 185 190 Ile Leu Gly Ala Asp Gly Asp Ser Asn Thr Cys Thr Ile Ile Ser Pro 195 200 Pro Thr Val Trp Leu Cys Ser Arg Glu Ala * 210 215 218

<210> 1702 <211> 86 <212> PRT <213> Homo sapiens

<400> 1702 Met Glu Gln Leu Leu Gly Ile Lys Leu Gly Cys Leu Phe Ala Leu Leu 5 10 Ala Leu Thr Leu Gly Cys Gly Leu Thr Pro Ile Cys Phe Lys Trp Phe 20 25 Gln Ile Asp Ala Ala Arg Gly His His Arg Leu Val Leu Arg Leu Leu 40 Gly Cys Ile Ser Ala Gly Val Phe Leu Gly Ala Gly Phe Met His Met 55 60 Thr Ala Glu Ala Leu Glu Glu Ile Glu Ser Gln Ile Gln Lys Phe Met 75 Val Gln Ile Ser Lys

<210> 1703 <211> 229 <212> PRT <213> Homo sapiens

<400> 1703 Met Leu Ser Met Leu Arg Thr Met Thr Arg Leu Cys Phe Leu Leu Phe Phe Ser Val Ala Thr Ser Gly Cys Ser Ala Ala Ala Ala Ser Ser Leu 20 25 Glu Met Leu Ser Arg Glu Phe Glu Thr Cys Ala Phe Ser Phe Ser Ser 35 40 45 Leu Pro Arg Ser Cys Lys Glu Ile Lys Glu Arg Cys His Ser Ala Gly 55 60 Asp Gly Leu Tyr Phe Leu Arg Thr Lys Asn Gly Val Val Tyr Gln Thr

Phe Cys Asp Met Thr Ser Gly Gly Gly Gly Trp Thr Leu Val Ala Ser 90 Val His Glu Asn Asp Met His Gly Lys Cys Thr Val Gly Asp Arg Trp 100 105 Ser Ser Gln Gln Gly Asn Lys Ala Asp Tyr Pro Glu Gly Asp Gly Asn 120 125 Trp Ala Asn Tyr Asn Thr Phe Gly Ser Ala Glu Ala Ala Thr Ser Asp 135 140 Asp Tyr Lys Asn Pro Gly Tyr Tyr Asp Ile Gln Ala Lys Asp Leu Gly 155 Ile Trp His Val Pro Asn Lys Ser Pro Met Gln His Trp Arg Asn Ser 165 170 Ala Leu Leu Arg Tyr Arg Thr Asn Thr Gly Phe Leu Gln Arg Leu Gly 180 185 His Asn Leu Phe Gly Ile Tyr Gln Lys Tyr Pro Val Lys Tyr Arg Ser 195 200 Gly Lys Cys Trp Asn Asp Asn Gly Pro Ala Ile Pro Trp Val Tyr Asp 215 Phe Gly Glu Ala * 225 228

<210> 1704 <211> 202 <212> PRT <213> Homo sapiens

<400> 1704 Met Val Phe Pro Val Met Tyr Asn Leu Ile Ile Leu Val Cys Arg Ala 5 10 Cys Phe Pro Asp Leu Gln His Gly Tyr Leu Val Ala Trp Leu Val Leu 20 Asp Tyr Thr Ser Asp Leu Leu Tyr Leu Leu Asp Met Val Val Arg Phe 35 40 His Thr Gly Phe Leu Glu Gln Gly Ile Leu Val Val Asp Lys Gly Arg 60 Ile Ser Ser Arg Tyr Val Arg Thr Trp Ser Phe Phe Leu Asp Leu Ala 70 75 Ser Leu Met Pro Thr Asp Val Val Tyr Val Arg Leu Gly Pro His Thr 85 90 Pro Thr Leu Arg Leu Asn Arg Phe Leu Arg Ala Pro Arg Leu Phe Glu 100 105 110 Ala Phe Asp Arg Thr Glu Thr Arg Thr Ala Tyr Pro Asn Ala Phe Cys 120 Ile Gly Lys Leu Met Leu Tyr Ile Phe Gly Arg Ile His Trp Asn Asn 130 135 140 Cys Leu Tyr Phe Ser Leu Ser Arg Tyr Leu Gly Phe Gly Arg Glu Pro 150 155 Met Gly Val Pro Arg Thr Pro Ala Pro Thr Trp Val Leu Thr Ala Arg 165 170 175 Gly Gly Pro Val Thr Ser Tyr Lys Leu Phe Asn Phe Phe His Pro Leu 180 185 . 190 Asp Thr Trp Ile Ile Gln Gly Gly Glu * 195 200 201

<210> 1705 <211> 58 <212> PRT <213> Homo sapiens

<400> 1705

<210> 1706 <211> 55 <212> PRT <213> Homo sapiens

<210> 1707 <211> 139 <212> PRT <213> Homo sapiens

<400> 1707 Met Leu Glu Cys Ala Phe Ile Val Leu Trp Leu Gln Leu Gly Trp Leu 1 5 10 15 Ser Gly Glu Asp Gln Val Thr Gln Ser Pro Glu Ala Leu Arg Leu Gln 25 30 Glu Gly Glu Ser Ser Ser Leu Asn Cys Ser Tyr Thr Val Ser Gly Leu 40 35 45 Arg Gly Leu Phe Trp Tyr Arg Gln Asp Pro Gly Lys Gly Pro Glu Phe 55 Leu Phe Thr Leu Tyr Ser Ala Gly Glu Glu Lys Glu Lys Glu Arg Leu 70 Lys Ala Thr Leu Thr Lys Lys Glu Ser Phe Leu His Ile Thr Ala Pro 85 90 95 Lys Pro Glu Asp Ser Ala Thr Tyr Leu Cys Ala Val Gln Ala Gln Phe 100 105 110 His Ser Gly Gly Gly Ala Asp Gly Leu Thr Phe Gly Lys Gly Thr Arg 115 125

Leu Lys Val Leu Ala Leu Tyr Pro Glu Pro * 130 135 138

<210> 1708 <211> 59 <212> PRT <213> Homo sapiens

Thr Leu Ile Gly Leu Asn Leu Ser Arg Gly * 50 58

<210> 1709 <211> 81 <212> PRT <213> Homo sapiens

<210> 1710 <211> 399 <212> PRT <213> Homo sapiens

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55
                                       60
Ile Asn Leu Thr Trp His Lys Asn Asp Ser Ala Arg Thr Val Pro Gly
                         75
               70
Glu Glu Glu Thr Arg Met Trp Ala Gln Asp Gly Ala Leu Trp Leu Leu
              85
                                90
Pro Ala Leu Gln Glu Asp Ser Gly Thr Tyr Val Cys Thr Thr Arg Asn
         100
                          105
Ala Ser Tyr Cys Asp Lys Met Ser Ile Glu Leu Arg Val Phe Glu Asn
     115
                       120
                                         125
Thr Asp Ala Phe Leu Pro Phe Ile Ser Tyr Pro Gln Ile Leu Thr Leu
               135
                                140
Ser Thr Ser Gly Val Leu Val Cys Pro Asp Leu Ser Glu Phe Thr Arg
                150
                          155
Asp Lys Thr Asp Val Lys Ile Gln Trp Tyr Lys Asp Ser Leu Leu
       165
                              170
Asp Lys Asp Asn Glu Lys Phe Leu Ser Val Arg Gly Thr Thr His Leu
         180
                           185
                                           190
Leu Val His Asp Val Ala Leu Glu Asp Ala Gly Tyr Tyr Arg Cys Val
 195
                        200
                                         205
Leu Thr Phe Ala His Glu Gly Gln Gln Tyr Asn Ile Thr Arg Ser Ile
                  215
                                    220
Glu Leu Arg Ile Lys Lys Lys Glu Glu Thr Ile Pro Val Ile Ile
               230
                        235 240
Ser Pro Leu Lys Thr Ile Ser Ala Ser Leu Gly Ser Arg Leu Thr Ile
              245 250
Pro Cys Lys Val Phe Leu Gly Thr Gly Thr Pro Leu Thr Thr Met Leu
         260
                           265
Trp Trp Thr Ala Asn Asp Thr His Ile Glu Ser Ala Tyr Pro Gly Gly
                        280
Arg Val Thr Glu Gly Pro Arg Gln Glu Tyr Ser Glu Asn Asn Glu Asn
                  295
                                     300
Tyr Ile Glu Val Pro Leu Ile Phe Asp Pro Val Thr Arg Glu Asp Leu
              310
                               315
His Met Asp Phe Lys Cys Val Val His Asn Thr Leu Ser Phe Gln Thr
                     330
Leu Arg Thr Thr Val Lys Glu Ala Ser Ser Thr Phe Ser Trp Gly Ile
                         345
                                            350
Val Leu Ala Pro Leu Ser Leu Ala Phe Leu Val Leu Gly Gly Ile Trp
    355
              . 360
                                        365
Met His Arg Arg Cys Lys His Arg Thr Gly Lys Ala Asp Gly Leu Thr
         375
                                   380
Val Leu Trp Pro His His Gln Asp Phe Gln Ser Tyr Pro Lys *
                 390
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<210> 1711 <211> 254 <212> PRT <213> Homo sapiens

Ile Ser Cys Pro His Glu Cys Phe Glu Ala Ile Leu Ser Leu Asp Thr 55 Gly Tyr Arg Ala Pro Val Thr Leu Val Arg Lys Gly Cys Trp Thr Gly 70 Pro Pro Ala Gly Gln Thr Gln Ser Asn Ala Asp Ala Leu Pro Pro Asp 85 90 Tyr Ser Val Val Arg Gly Cys Thr Thr Asp Lys Cys Asn Ala His Leu 100 105 110 Met Thr His Asp Ala Leu Pro Asn Leu Ser Gln Ala Pro Asp Pro Pro 120 125 Thr Leu Ser Gly Leu Glu Cys Tyr Ala Cys Ile Gly Val His Gln Asp 135 140 Asp Cys Ala Ile Gly Arg Ser Arg Arg Val Gln Cys His Gln Asp Gln 150 155 Thr Ala Cys Phe Gln Gly Asn Gly Arg Met Thr Val Gly Asn Phe Ser 165 170 Val Pro Val Tyr Ile Arg Thr Cys His Arg Ala Leu Leu His His Leu 180 185 Met Gly Thr Thr Ser Pro Trp Thr Ala Ile Gly Pro Pro Arg Gly Ser 200 205 Cys Cys Glu Gly Tyr Leu Cys Asn Arg Lys Ser Met Thr Gln Pro Phe 215 220 Thr Ser Ala Ser Ala Thr Thr Pro Pro Arg Ala Leu Gln Val Leu Ala 225 230 235 Leu Leu Pro Val Leu Leu Leu Val Gly Leu Ser Ala 245

<210> 1712 <211> 124 <212> PRT <213> Homo sapiens

<400> 1712 Met Thr Trp Leu Leu Val Ala Tyr Ala Asp Phe Val Val Thr Phe Val 10 Met Leu Leu Pro Ser Lys Asp Phe Trp Tyr Ser Val Val Asn Gly Val 2.0 25 Ile Phe Asn Cys Leu Ala Val Leu Ala Leu Ser Ser His Leu Arg Thr 40 45 Met Leu Thr Asp Pro Glu Lys Ser Ser Asp Cys Arg Pro Ser Ala Cys 55 60 Thr Val Lys Thr Gly Leu Asp Pro Thr Leu Val Gly Ile Cys Gly Glu 75 Gly Thr Glu Ser Val Gln Ser Leu Leu Cly Ala Val Pro Lys Gly 85 90 Asn Ala Thr Lys Glu Tyr Met Asp Glu Leu Ala Ala Glu Ala Arg Gly 100 105 Ser His Leu Gln Val Pro Gln Val Leu Leu Tyr 🛽 * 120

<210> 1713 <211> 214 <212> PRT <213> Homo sapiens

<400> 1713 Met Leu His Leu Val Phe Ile Leu Pro Ser Leu Met Leu Leu Ile Pro 1 5 10 His Ile Leu Leu Glu Asn Phe Ala Ala Ala Ile Pro Gly His Arg Cys 20 25 Trp Val His Met Leu Asp Asn Asn Thr Gly Ser Gly Asn Glu Thr Gly 40 Ile Leu Ser Glu Asp Ala Leu Leu Arg Ile Ser Ile Pro Leu Asp Ser 55 60 Asn Leu Arg Pro Glu Lys Cys Arg Arg Phe Val His Pro Gln Trp Gln 70 75 Leu Leu His Leu Asn Gly Thr Ile His Ser Thr Ser Glu Ala Asp Thr 85 90 Glu Pro Cys Val Asp Gly Trp Val Tyr Asp Gln Ser Tyr Phe Pro Ser 1.00 105 Thr Ile Val Thr Lys Trp Asp Leu Val Cys Asp Tyr Gln Ser Leu Lys 120 Ser Val Val Gln Phe Leu Leu Leu Thr Gly Met Leu Val Gly Gly Ile 135 140 Ile Gly Gly His Val Ser Asp Arg Trp Leu Val Glu Ser Ala Arg Trp 150 155 Leu Ile Ile Thr Asn Lys Leu Asp Glu Gly Leu Lys Ala Leu Arg Lys 165 170 175 Val Ala Arg Thr Asn Gly Ile Lys Asn Ala Glu Arg Asn Pro Glu His 180 185 Arg Gly Cys Lys Ile His His Ala Gly Gly Ala Gly Cys Ser Thr Asp 195 200 Gln Asn Tyr Cys Val 210 213

<210> 1714 <211> 178 <212> PRT <213> Homo sapiens

<400> 1714 Met Ala Ala Ser Trp Ser Leu Leu Val Thr Leu Arg Pro Leu Ala Gln 1 5 10 Ser Pro Leu Arg Gly Arg Cys Val Gly Cys Gly Ala Trp Ala Ala Ala 20 25 Leu Ala Pro Leu Ala Thr Ala Pro Gly Lys Pro Phe Trp Lys Ala Tyr 35 40 45 Thr Val Gln Thr Ser Glu Ser Met Thr Pro Thr Ala Thr Ser Glu Thr 55 60 Tyr Leu Lys Ala Leu Ala Val Cys His Gly Pro Leu Asp His Tyr Asp 70 75 Phe Leu Ile Lys Ala His Glu Leu Lys Asp Asp Glu His Gln Arg Arg 85 90 Val Ile Gln Cys Leu Gln Lys Leu His Glu Asp Leu Lys Gly Tyr Asn 1.00 105 110 Ile Glu Ala Glu Gly Leu Phe Phe Lys Ala Phe Phe Lys Glu Gln Thr 115 120 125 Ser Lys Gly Pro Val Cys Leu Trp Arg Cys Trp Tyr Arg Lys Asn Asn 1.40

Gly Asp Gly His Val Leu Cys Leu Cys Gly Asn Glu Glu Glu Lys Thr 145 - 150 - 150 - 160 Gly Ser Phe Ser Trp Phe His Ala Arg Cys Ala Gln Lys Asn Thr Ser Pro * 165 - 165 - 170 -

<210> 1715 <211> 76 <212> PRT <213> Homo sapiens

<400> 1715 Met Arg Val Thr Ala Pro Arg Thr Val Leu Leu Leu Trp Gly Ala . 1 5 10 15 Val Ala Leu Thr Glu Thr Trp Ala Gly Ser His Ser Met Lys Tyr Phe 20 25 30 Tyr Thr Ala Met Ser Arg Ala Gly Arg Gly Glu Pro Arg Phe Ile Ala 35 40 Glu Gly Tyr Val Asp Asp Thr Gln Phe Val Arg Phe Asp Ser Asp Ala 50 55 Ala Ser Pro Lys Thr Asp Pro Gly Arg His Gly 70

<210> 1716 <211> 83 <212> PRT <213> Homo sapiens

<400> 1716 Met Arg Phe Thr Phe Pro Leu Met Ala Ile Val Leu Glu Ile Ala Met 5 10 Ile Ala Ser Phe Gly Leu Phe Val Glu Tyr Glu Thr Asp His Thr Val 20 25 Leu Glu His Phe Asn Ile Thr Lys Pro Ser Asp Met Gly Ile Phe Phe 35 40 Glu Leu Tyr Pro Leu Phe Gln Asp Val His Gly Met Ile Phe Val Gly 55 60 Phe Asp Phe Pro Pro Asp Leu Pro Glu Glu Leu Trp Val Ser Gln Arg 65 70 Gly Tyr * 82

<210> 1717 <211> 57 <212> PRT <213> Homo sapiens

<400> 1717
Met Ala Leu Phe Phe Leu Ala Leu Asn Phe Trp Lys Val Gly Met Ala

<210> 1718 <211> 76 <212> PRT <213> Homo sapiens

<210> 1719 <211> 71 <212> PRT <213> Homo sapiens

<210> 1720 <211> 101 <212> PRT <213> Homo sapiens

 Phe
 Pro
 Leu
 Pro
 His
 Pro
 Thr
 Leu
 Gly
 Pro
 Arg
 His
 Ala
 Ser
 Leu

 Thr
 Gln
 Leu
 Gly
 Pro
 Ala
 Phe
 Try
 Met
 Ala
 Try
 Gly
 Arg
 Pro
 Try
 Ala

 His
 Leu
 Gly
 Pro
 Gly
 Gln
 Pro
 Leu
 Gly
 Gln
 Leu
 Try
 Leu
 Try
 Leu
 Ala
 Leu
 Gly
 Fro
 Inch
 Fro
 Inch
 Inch

<210> 1721 <211> 48 <212> PRT

<213> Homo sapiens

<210> 1722 <211> 70 <212> PRT <213> Homo sapiens

<210> 1723 <211> 54 <212> PRT <213> Homo sapiens

<400> 1723
Met Asp Leu Ile Phe Val Lys Val Leu Leu Ile Phe Ala Ala Ile Gln

1 5 10 15
Thr Leu Ser Lys Trp Gln Phe Ala Phe Thr Phe Ser Ile Gln Thr Val
20 25 30
Pro Ser Leu Val Ile Asn Leu Ser Trp Leu Leu Asp Leu Lys Pro
35 40 45
Gly Thr His Ile Gln *
50 53

<210> 1724 <211> 60 <212> PRT <213> Homo sapiens

<210> 1725 <211> 63 <212> PRT <213> Homo sapiens

<210> 1726 <211> 57 <212> PRT <213> Homo sapiens

Ser Gln Arg Leu Lys Glu Glu * 50 55 56

<210> 1727

<211> 46

<212> PRT

<213> Homo sapiens

<400> 1727

<210> 1728

<211> 46

<212> PRT

<213> Homo sapiens

<400> 1728

<210> 1729

<211> 49

<212> PRT

<213> Homo sapiens

<400> 1729

<210> 1730

<211> 50

<212> PRT

<213> Homo sapiens

<210> 1731 <211> 227 <212> PRT <213> Homo sapiens

<400> 1731 Met Gly Cys Asp Gly Arg Val Ser Gly Leu Leu Arg Arg Asn Leu Gln Pro Thr Leu Thr Tyr Trp Ser Val Phe Phe Ser Phe Gly Leu Cys Ile Ala Phe Leu Gly Pro Thr Leu Leu Asp Leu Arg Cys Gln Thr His Ser Ser Leu Pro Gln Ile Ser Trp Val Phe Phe Ser Gln Gln Leu Cys Leu 55 Leu Leu Gly Ser Ala Leu Gly Gly Val Phe Lys Arg Thr Leu Ala Gln 70 75 Ser Leu Trp Ala Leu Phe Thr Ser Ser Leu Ala Ile Ser Leu Val Phe 85 90 Ala Val Ile Pro Phe Cys Arg Asp Val Lys Val Leu Ala Ser Val Met 100 105 110 Ala Leu Ala Gly Leu Ala Met Gly Cys Ile Asp Thr Val Ala Asn Met 115 120 125 Gln Leu Val Arg Met Tyr Gln Lys Asp Ser Ala Val Phe Leu Gln Val 135 140 Leu His Phe Phe Val Gly Phe Gly Ala Leu Leu Ser Pro Leu Ile Ala 150 155 Asp Pro Phe Leu Ser Glu Ala Asn Cys Leu Pro Ala Asn Ser Thr Gly 165 170 175 Gln His His Leu Pro Arg Ala Thr Cys Ser Met Ser Pro Gly Cys Trp 180 185 190 Gly Gln His His Val Asp Ala Gln Ala Leu Val Gln Pro Asp Val Pro 200 205 Lys Ala Asp Ser Gln Gly Pro Gly Arg Glu Pro Glu Gly Pro Met Pro 210 215 Ser Gly * 225 226

<210> 1732 <211> 102 <212> PRT <213> Homo sapiens

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<400> 1732 Met Val Ser Lys Phe Leu Leu Ser His Leu Val Leu Ala Val Pro Leu 10 Arg Val Leu Leu Val Leu Trp Ala Leu Cys Val Gly Leu Ser Arg Val 25 20 3.0 Met Ile Gly Arg His His Val Thr Asp Val Leu Ser Gly Phe Val Ile 40 35 45 Gly Tyr Leu Gln Phe Arg Met Met Glu Lys Val Ser Met Gln Tyr Lys 55 Thr Cys Arg Met Leu Ile Phe Val Trp Arg Arg Ala Arg Arg Pro Thr 70 75 His Thr Phe Glu Gly Arg Leu Val Ser Lys Lys Gly Gln Asp Leu Ala 85 90 Arg Trp Leu Ser Leu * 100 101

<210> 1733 <211> 139 <212> PRT

<213> Homo sapiens

<400> 1733 Met Lys Phe Thr Thr Leu Leu Phe Leu Ala Ala Val Ala Gly Ala Leu 5 10 Val Tyr Ala Glu Asp Ala Ser Ser Asp Ser Thr Gly Ala Asp Pro Ala 20 25 3.0 Gln Glu Ala Gly Thr Ser Lys Pro Asn Glu Glu Ile Ser Gly Pro Ala 35 40 Glu Pro Ala Ser Pro Pro Glu Thr Thr Thr Thr Ala Gln Glu Thr Ser 55 Ala Ala Ala Val Gln Gly Thr Ala Lys Val Thr Ser Ser Arg Gln Glu 70 Leu Asn Pro Leu Lys Ser Ile Val Glu Lys Ser Ile Leu Leu Thr Glu 85 90 Gln Ala Leu Ala Lys Ala Gly Lys Gly Met His Gly Gly Val Pro Gly 105 100 310 Gly Lys Gln Phe Ile Glu Asn Gly Ser Glu Phe Ala Gln Lys Leu Leu 125 115 120 Lys Lys Phe Ser Leu Leu Lys Pro Trp Ala 130 138 135

<210> 1734 <211> 60 <212> PRT <213> Homo sapiens

35 40 45
Gln Leu Val Cys Trp Ile Leu Thr Phe Phe *
50 55 59

<210> 1735 <211> 73 <212> PRT <213> Homo sapiens

<400> 1735

Met Cys Ala Cys Ala Val Arg Ala Leu Ser Leu Ala Gly Gly Ala Val 5 10 Leu Leu Ser Ser Leu Cys Ala Cys Ala Arg Ala Pro Arg Tyr Val Gly 2.0 30 25 Gly Glu Arg Arg Val Gln Ser Pro Ala Arg Pro Ala Asp Ser Val Ala 35 40 45 Arg Ile Ala Phe Ile Leu Phe Arg Phe Arg Thr Asp Leu Gln Ser Gly 55 Pro Ser Leu His Leu Gly Ile Cys * 70 72

<210> 1736 <211> 65 <212> PRT <213> Homo sapiens

<400> 1736

Thr Cys Ala Asn Pro Gly Ser Val Glu Arg Leu Ile Trp Glu Phe Gln 50 60 64

<210> 1737 <211> 47 <212> PRT <213> Homo sapiens

<210> 1738 <211> 107 <212> PRT <213> Homo sapiens

<400> 1738 Met Val Thr Gln Leu Thr Leu Glu Val Leu His Leu Ser Leu Val Val 5 10 Gly Gln Val Ser Asn Asn Leu Leu His Ile Gly Pro Leu Ala Ser 2.0 Glu Gln Met Phe Tyr Ala Val Ala Thr Lys Ile Arg Asp Glu Asn Thr 35 45 Tyr Lys Ile Cys Thr Trp Leu Glu Ile Lys Val His His Val Leu Leu 55 His Ile Gln Gly Thr Leu Thr Cys Ser Tyr Leu Ser His Ser Glu Gln 70 75 Leu Val Phe Gln Ser Tyr Glu Tyr Val Asp Cys Arg Gly Asn Ala Ser 85 90 Val Pro His Gln Leu Thr Pro His Pro Pro * 100 105 106

<210> 1739 <211> 90 <212> PRT <213> Homo sapiens

<400> 1739 Met Val Leu Pro Pro His Lys Thr Val Gln Leu Pro Arg Leu His Leu 1 5 10 Val Trp Leu Trp Val Ser Gln Ala Trp Val Gly Gly Thr Val Leu His 2.0 25 Trp Leu Ala Ser Gln Gln Leu Cys Val Leu Val Pro Ala Ser Leu Thr 35 40 Met Ser Trp Asp Leu Glu Ala Arg Leu Gly Tyr Ile Leu Ala Trp Met 55 60 Ser Leu Gly Pro Cys Tyr Cys Cys Leu Phe Thr Ile Pro Thr Leu Leu 70 Glu Ile Ser Leu Ile Val Ser Leu Ala 85

<210> 1740 <211> 57 <212> PRT <213> Homo sapiens

 $<\!400\!>$ 1740 Met His Cys Val Leu Glu Ile Leu Val Ser Val Leu Gly Leu Thr His 1 5 10 15 His Leu Leu Leu Arg Asp Arg Asp His Tyr Arg Leu Val Arg Leu Met

25 30

Gly Asp Val Gly Gly Glu Gly Leu Lys Ala Met Trp Arg Val Cys
35 40 45

Leu Ser Val Cys Arg Val Asp Lys *
50 55 56

<210> 1741 <211> 49 <212> PRT <213> Homo sapiens

<210> 1742 <211> 87 <212> PRT <213> Homo sapiens

<400> 1742 Met Ser Phe Val Lys Ile Leu Ile Trp Glu Leu Phe Ile Ala Cys Phe 1 5 10 15 Pro Gln Gly Pro Leu Val His Ser Gly Lys Met Leu Lys His Gly Leu 25 30 Asp Trp His Arg Thr Leu Leu Gln Lys His Pro Cys Ile Leu Phe Phe 40 Ser Phe Leu Lys Trp Asn Leu Ala Leu Ser Pro Trp Met Glu Gly Ser 55 60 Gly Ala Ile Ser Ala His Cys Asn Leu Cys Leu Leu Gly Ser Arg Asp 70 65 Ala Pro Ala Ser Val Ser 85 86

<210> 1743 <211> 49 <212> PRT <213> Homo sapiens

Gly Trp Leu Asn Glu Leu Lys Thr Ser Leu Lys Tyr Ile Arg Leu Arg
35 40 45 48

<210> 1744 <211> 57 <212> PRT <213> Homo sapiens

<210> 1745 <211> 96 <212> PRT <213> Homo sapiens

<400> 1745 Met Asn Gln Leu Ser Phe Leu Leu Phe Leu Ile Ala Thr Thr Arg Gly 1 5 10 Trp Ser Thr Asp Glu Ala Asn Thr Tyr Phe Leu Glu Cys Thr Cys Ser 2.0 Trp Ser Pro Ser Leu Pro Lys Ser Cys Pro Glu Ile Lys Asp Gln Cys 35 40 4.5 Pro Ser Ala Phe Asp Gly Leu Tyr Phe Ile Arg Thr Glu Asn Ala Val 55 60 Ile His His Thr Phe Cys Val Met Thr Ser Ala Gly Cys Phe Trp Ile 70 75 Leu Lys Val Thr Val His Asn Tyr Asp Leu Thr Thr Asp Thr Pro $\,\,\star\,\,$ 90

<210> 1746 <211> 53 <212> PRT <213> Homo sapiens

35 40 45
Lys Leu Thr Ser Val
50 53

40

<210> 1747 <211> 49 <212> PRT <213> Homo sapiens

<210> 1748 <211> 196 <212> PRT <213> Homo sapiens

<400> 1748 Met Ala Met Leu Pro Phe Pro Ile Phe Leu Val Leu Leu Arg Gly 5 10 Leu Val Leu Trp Thr Pro Ala Ser Ser Gly Thr Ile Met Pro Glu Glu 20 25 Arg Lys Thr Glu Ile Glu Arg Glu Thr Glu Thr Glu Ser Glu Thr Val 35 40 Ile Gly Thr Glu Lys Glu Asn Ala Pro Glu Arg Glu Arg Gly Ser Val 55 60 Ile Thr Val Leu His Gln Val Phe Ser Thr Ala Met Lys Asn Asp Thr 75 Asp Thr Gly Asn Met Gln Lys Glu Val Met Ser Val Thr Glu Gln Val 90 Glu Lys Lys Lys Asn Asp Ile Glu Lys Asp Asp Thr Gly Arg Lys Arg 105 Lys Pro Asp Ile Ser Leu Leu Glu Val Ile Val Asp Val Ala Met Lys 115 120 Val Lys Lys Glu Ile Val Thr Gly Asp Thr Asn Thr Lys Asn Leu Lys

145

Arg Ala Pro Lys Leu His Leu Gln Asn Arg His Gly Phe Gly Leu Leu
165

170

175

Cys Ile Leu Val Pro Glu Val Asp Thr Ile Asn Leu Val Ile Phe Leu
180

185

190

Glu Ala Lys Lys Glu Lys Lys Arg Ala Val Ser Leu Pro Leu Asn Arg

135

Asp Asn Val * 195

<210> 1749 <211> 46 <212> PRT <213> Homo sapiens

<400> 1749

Met Leu Val Lys Val Val Tyr Val Met Gly Ala Ile Leu Lys Ile Phe 1 5 10 15 Leu Arg Glu Gly Asn Val Ile Asn Gln Arg Ser Gly Met Asp Ile Glu 20 25 30 Lys Tyr Ser Glu His Tyr Leu Ala Gln Gly Val Arg Trp *

<210> 1750 <211> 82 <212> PRT <213> Homo sapiens

<400> 1750

Met Glu Leu Val Arg Arg Leu Met Pro Leu Thr Leu Leu Ile Leu Ser 1 5 10 Cys Leu Ala Glu Leu Thr Met Ala Glu Ala Glu Gly Asn Ala Ser Cys 20 25 Thr Val Ser Leu Gly Gly Ala Asn Met Ala Glu Thr His Lys Ala Met 35 40 Ile Leu Gln Leu Asn Pro Ser Glu Asn Cys Thr Trp Thr Ile Glu Arg 50 55 ' 60 Pro Glu Asn Lys Ser Ile Arg Ile Ile Phe Cys Tyr Val Gln Leu Gly Ser Glu 82

<210> 1751 <211> 94 <212> PRT <213> Homo sapiens

<400> 1751

Met Gly Ser Val Phe Trp His Val Leu Phe Cys Ile Ser Gly Val Cys 1 5 10 Leu Trp Cys Ala His Arg Met Ala Ala Phe Leu Gln Gln Met Ala Val 20 25 Leu Leu Pro Val Asp Cys Glu Arg Pro Ala Ala Val His Trp Leu Ala 45 40 35 Leu Cys Gly Cys Cys Tyr Gly Gln Leu Val Trp Glu Ser Arg Thr Arg 55 - 60 Ser Cys Phe Trp Ser Leu Glu Cys Leu Cys Phe Gly Gly Gln His Phe 65 70 75 Gly Ser Val Pro Ser Phe Phe Cys Ser Ser Val Trp Leu * 85 90

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<210> 1752
<211> 143
<212> PRT
<213> Homo sapiens
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<400> 1752 Met Asp Thr Trp Leu Val Cys Trp Ala Ile Phe Ser Leu Leu Lys Ala 10 Gly Leu Thr Glu Pro Glu Val Thr Gln Thr Pro Ser His Gln Val Thr 20 25 Gln Met Gly Gln Glu Val Ile Leu Arg Cys Val Pro Ile Ser Asn His 35 40 45 Leu Tyr Phe Tyr Trp Tyr Arg Gln Ile Leu Gly Gln Lys Val Glu Phe 55 60 Leu Val Ser Phe Tyr Asn Asn Glu Ile Ser Glu Lys Ser Glu Ile Phe . 70 75 Asp Asp Gln Phe Ser Val Glu Arg Pro Asp Gly Ser Asn Phe Thr Leu 85 90 Lys Ile Arg Ser Thr Lys Leu Glu Asp Ser Ala Met Tyr Phe Cys Ala 100 105 110 Ser Ser Glu Arg Gly Ser Gly Ala Asn Val Leu Thr Phe Gly Ala Gly 120 125 Ser Arg Leu Thr Val Leu Glu Asp Leu Lys Asn Val Phe Pro Pro 140

<210> 1753 <211> 64 <212> PRT <213> Homo sapiens

<210> 1754 <211> 124 <212> PRT <213> Homo sapiens

Val Ser Leu Gly Glu Thr Ala Thr Ile Asp Cys Arg Ser Ser Gln Ser 40 Val Leu Tyr His Ala Asn Asn Lys Asn Tyr Leu Thr Trp Tyr Gln Gln 50 55 60 Arg Pro Arg Gln Ser Pro Lys Val Leu Ile Phe Trp Ala Ser Thr Arg 70 75 Glu Thr Gly Val Pro Asp Arg Phe Thr Gly Ser Gly Ser Gly Thr Asp 85 90 Tyr Ser Leu Thr Ile Ser Ser Leu Gln Ala Glu Asp Val Ala Thr Tyr 100 105 Tyr Cys Gln Gln Tyr Tyr Asp Ser Pro Ile Thr Phe 120

<210> 1755 <211> 111 <212> PRT

<213> Homo sapiens

<400> 1755 Met Gln Ala Thr Ser Asn Leu Leu Asn Leu Leu Leu Leu Ser Leu Phe 5 10 Ala Gly Leu Asn Pro Ser Lys Thr His Ile Asn Pro Lys Glu Gly Trp 20 25 Gln Val Tyr Ser Ser Ala Gln Asp Pro Asp Gly Arg Gly Ile Cys Thr 35 40 Val Val Ala Pro Glu Gln Asn Leu Cys Ser Arg Asp Ala Lys Ser Arg 55 Gln Leu Arg Gln Leu Leu Glu Lys Val Gln Asn Met Ser Gln Ser Ile 65 70 Glu Val Leu Asn Leu Arg Thr Gln Arg Asp Phe Gln Tyr Val Leu Lys 85 90 Met Glu Thr Gln Met Lys Gly Leu Lys Ala Lys Phe Arg Gln Ile 105

<210> 1756 <211> 74 <212> PRT <213> Homo sapiens

<400> 1756 Met Leu Pro Arg Leu Val Leu Ser Ser Trp Pro Gln Ser Ile Phe Leu 10 Pro Arg Phe Trp Asn Tyr Arg Cys Glu Pro Pro Cys Leu Ala Cys Phe 25 Asp Ile Phe Tyr Ser Val Leu Ile Thr Asn Ser Leu His Met Pro Glu 40 Tyr Lys Ser Lys Cys Tyr Leu Leu Phe Arg Trp Glu Leu Gln Lys Leu 55 His Gln Lys Tyr Ala Leu Arg Tyr Ile * 70

<210> 1757 <211> 50 <212> PRT <213> Homo sapiens

<210> 1758 <211> 123 <212> PRT <213> Homo sapiens

<400> 1758 Met Ala Trp Ile Pro Leu Phe Leu Gly Val Leu Ala Tyr Cys Thr Glu 1 5 10 Ser Val Ala Ser Tyr Glu Leu Phe Gln Pro Pro Ser Val Ser Val Ser 20 25 Pro Gly Gln Thr Ala Thr Phe Thr Cys Ser Gly Asp Asp Leu Gly Asn 35 40 Lys Tyr Ile Cys Trp Tyr Leu Gln Lys Pro Gly Gln Pro Pro Val Val 55 60 Leu Met Tyr Gln Asp Asn Lys Arg Pro Ser Gly Ile Pro Glu Arg Phe 70 75 Ser Gly Ser Asn Ser Gly Ser Thr Ala Thr Leu Thr Ile Ser Gly Thr 85 90 95 Gln Ala Thr Asp Glu Ala Leu Tyr Phe Cys Gln Ala Trp Asp Thr Asn 100 105 Gly Ala Val Phe Gly Gly Gly Thr Gln Leu Thr 120 123

<210> 1759 <211> 75 <212> PRT <213> Homo sapiens

Pro Cys Leu Tyr Leu Glu Gly Asn Pro Thr * 65 70 74

<210> 1760 <211> 122 <212> PRT <213> Homo sapiens

<400> 1760 Met Arg Leu Pro Asp Val Gln Leu Trp Leu Val Leu Leu Trp Ala Leu 10 Val Arg Ala Gln Gly Thr Gly Ser Val Cys Pro Ser Cys Gly Gly Ser 25 Lys Leu Ala Pro Gln Ala Glu Arg Ala Leu Val Leu Glu Leu Ala Lys 4.0 Gln Gln Ile Leu Asp Gly Leu His Leu Thr Ser Arg Pro Arg Ile Thr 55 His Pro Pro Pro Gln Ala Ala Leu Thr Arg Ala Leu Arg Arg Leu Gln 70 Pro Gly Ser Val Ala Pro Gly Asn Gly Glu Glu Val Ile Ser Phe Ala 85 90 Thr Val Thr Asp Ser Thr Ser Ala Tyr Ser Ser Leu Leu Thr Phe His 100 105 Leu Ser Thr Pro Arg Ser His His Leu Tyr 115 120 122

<210> 1761 <211> 123 <212> PRT <213> Homo sapiens

<400> 1761 Met Arg Val Arg Ile Gly Leu Thr Leu Leu Leu Cys Ala Val Leu Leu 10 Ser Leu Ala Ser Ala Ser Ser Asp Glu Glu Gly Ser Gln Asp Glu Ser 20 25 Leu Asp Ser Lys Thr Thr Leu Thr Ser Asp Glu Ser Val Lys Asp His 40 Thr Thr Ala Gly Arg Val Val Ala Gly Gln Ile Phe Leu Asp Ser Glu 55 Glu Ser Glu Leu Glu Ser Ser Ile Gln Glu Glu Glu Asp Ser Leu Lys 70 75 Ser Gln Glu Gly Glu Ser Val Thr Glu Asp Ile Ser Phe Leu Glu Ser 85 90 Pro Asn Pro Glu Asn Lys Asp Tyr Glu Glu Pro Lys Lys Val Arg Lys 100 105 Pro Gly Ser Leu Asp Ile Phe Leu Ala Phe * 120

<210> 1762 <211> 145

<212> PRT <213> Homo sapiens <221> misc_feature <222> (1)...(145) <223> Xaa = any amino acid or nothing

<400> 1762 Met Ala Leu Ala Ala Leu Met Ile Ala Leu Gly Ser Leu Gly Leu His Thr Trp Gln Ala Gln Ala Val Pro Thr Ile Leu Pro Leu Gly Leu Ala 20 25 Pro Asp Thr Phe Asp Asp Thr Tyr Val Gly Cys Ala Glu Glu Met Glu 40 45 Glu Lys Ala Ala Pro Leu Leu Lys Glu Glu Met Ala His His Ala Leu 55 60 Leu Arg Glu Ser Trp Glu Ala Ala Gln Glu Thr Trp Glu Asp Lys Arg 70 75 Arg Gly Leu Thr Leu Pro Pro Gly Phe Lys Ala Gln Asn Gly Ile Ala 8.5 90 Ile Met Val Tyr Thr Asn Ser Ser Asn Thr Leu Tyr Trp Glu Leu Asn 100 105 110 Xaa Ala Val Arg Thr Gly Gly Gly Ser Arg Glu Leu Tyr Met Arg His 115 120 125 Phe Pro Phe Lys Ala Leu His Phe Tyr Leu Ile Arg Ala Leu Gln Leu Leu 145

<210> 1763 <211> 257 <212> PRT <213> Homo sapiens

<400> 1763 Met Lys Arg Glu Arg Gly Ala Leu Ser Arg Ala Ser Arg Ala Leu Arg 10 Leu Ala Pro Phe Val Tyr Leu Leu Leu Ile Gln Thr Asp Pro Leu Glu 25 Gly Val Asn Ile Thr Ser Pro Val Arg Leu Ile His Gly Thr Val Gly 40 45 Lys Ser Ala Leu Leu Ser Val Gln Tyr Ser Ser Thr Ser Ser Asp Arg 55 Pro Val Val Lys Trp Gln Leu Lys Arg Asp Lys Pro Val Thr Val Val 70 75 Gln Ser Ile Gly Thr Glu Val Ile Gly Thr Leu Arg Pro Asp Tyr Arg 85 90 Asp Arg Ile Arg Leu Phe Glu Asn Gly Ser Leu Leu Leu Ser Asp Leu 100 105 110 Gln Leu Ala Asp Glu Gly Thr Tyr Glu Val Glu Ile Ser Ile Thr Asp 120 125 Asp Thr Phe Thr Gly Glu Lys Thr Ile Asn Leu Thr Val Asp Val Pro 135 140 Ile Ser Arg Pro Gln Val Leu Gly Ala Ser Thr Thr Val Leu Glu Leu 155

· Ser Glu Ala Phe Thr Leu Asn Cys Ser His Glu Asn Gly Thr Lys Pro 170 175 Ser Tyr Thr Trp Leu Lys Asp Gly Lys Pro Leu Leu Asn Asp Ser Arg 185 190 Met Leu Leu Ser Pro Asp Gln Lys Val Leu Thr Ile Thr Arg Val Leu 200 205 Met Glu Asp Asp Asp Leu Tyr Ser Cys Val Val Glu Asn Pro Ile Asn 210 215 220 Gln Gly Arg Thr Leu Pro Cys Lys Ile Thr Glu Tyr Arg Lys Ser Ser 230 235 Leu Ser Ser Ile Trp Leu Gln Glu Ala Phe Ser Ser Leu Gly Pro Trp 245 250

<210> 1764 <211> 166 <212> PRT <213> Homo sapiens <221> misc_feature <222> (1) ... (166) <223> Xaa = any amino acid or nothing

<400> 1764 Met Ala Leu Lys Val Leu Leu Glu Glu Glu Lys Thr Phe Phe Thr Leu 10 Leu Val Leu Gly Tyr Leu Ser Cys Lys Val Thr Cys Glu Ser Gly 20 25 Asp Cys Arg Gln Gln Glu Phe Arg Asp Arg Ser Gly Asn Cys Val Pro 35 40 Cys Asn Gln Cys Gly Pro Gly Met Glu Leu Ser Lys Glu Cys Gly Phe 55 Gly Tyr Gly Glu Asp Ala Gln Cys Val Thr Cys Arg Leu His Arg Phe 70 Lys Glu Asp Trp Gly Phe Gln Lys Cys Lys Pro Cys Leu Asp Cys Ala 85 90 Val Val Asn Arg Phe Gln Lys Ala Asn Cys Ser Ala Thr Ser Asp Ala 105 110 Ile Cys Gly Asp Cys Leu Pro Gly Phe Tyr Arg Lys Thr Lys Leu Val 120 125 Gly Phe Gln Asp Met Glu Trp Trp Xaa Ala Leu Val Gly Arg Thr Pro 130 135 140 Phe Leu Pro Ser Leu Tyr Gly Asn Pro Ala Leu Gly Cys Gln Pro Arg 150 155 Val Gln Thr Phe Gly Glu 165 166

<210> 1765 <211> 90 <212> PRT <213> Homo sapiens

<210> 1766 <211> 57 <212> PRT <213> Homo sapiens

<210> 1767 <211> 63 <212> PRT <213> Homo sapiens

<210> 1768 <211> 174 <212> PRT <213> Homo sapiens

<400> 1768

Met Pro Ser Gly Cys Arg Cys Leu His Leu Val Cys Leu Leu Cys Ile 10 Leu Gly Ala Pro Gly Gln Pro Val Arg Ala Asp Asp Cys Ser Ser His 20 25 Cys Asp Leu Ala His Gly Cys Cys Ala Pro Asp Gly Ser Cys Arg Cys 40 Asp Pro Gly Trp Glu Gly Leu His Cys Glu Arg Cys Val Arg Met Pro 60 Gly Cys Gln His Gly Thr Cys His Gln Pro Trp Gln Cys Ile Cys His 75 70 Ser Gly Trp Ala Gly Lys Phe Cys Asp Lys Asp Glu His Ile Cys Thr 90 Thr Gln Ser Pro Cys Gln Asn Gly Gly Gln Cys Met Tyr Asp Gly Gly 100 105 110 Gly Glu Tyr His Cys Val Cys Leu Pro Gly Phe His Gly Arg Asp Cys
115 120 125 Glu Arg Lys Ala Gly Pro Cys Glu Gln Ala Gly Ser Pro Cys Arg Asn 135 140 Gly Gly Gln Cys Gln Asp Asp Gln Gly Phe Ala Leu Asn Phe Thr Cys 155 150 Arg Cys Leu Val Gly Phe Val Gly Ala Arg Cys Asp Val 165 170 173

<210> 1769 <211> 78 <212> PRT <213> Homo sapiens

<400> 1769

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 Ser
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 Phe
 Thr
 Ala
 Met

 Gly
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 Cys
 Leu
 Ala
 Ser
 Leu
 Thr
 Leu
 His
 Leu
 Leu
 Ser
 Val
 Pro
 Val
 Pro
 Gly
 Phe
 Ser
 Leu
 Leu
 Ser
 Leu
 Ser
 Arg
 Pro
 Arg
 Cys
 Ala
 His
 Leu
 Phe
 Ala
 His
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 Phe
 Ala
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 Phe
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 Ala
 Leu
 Phe

<210> 1770 <211> 149 <212> PRT <213> Homo sapiens

<400> 1770

 Met
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 Val
 Thr
 Leu
 Gly
 Leu
 Leu
 Thr
 Ser
 Phe
 P

<210> 1771 <211> 76 <212> PRT <213> Homo sapiens

<210> 1772 <211> 128 <212> PRT <213> Homo sapiens

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